Appendix DD
Response to Public Comments on the Draft FR/EIS

Appendix DD, Response to Public Comments on the Draft FR/EIS, includes the following information:

- Comments and Responses

- Comment Letters
  - Representative Ed Perlmutter
  - Representative Mike Coffman
  - U.S. Senators Mark Udall and Michael F. Bennet
  - Suzanne J. Bohan, Director, NEPA Compliance and Review Program, Office of Ecosystems Protection and Remediation, U.S. Environmental Protection Agency, Region 8
  - Robert F. Stewart, Regional Environmental Officer, U.S. Department of the Interior, Office of Environmental Policy and Compliance
  - Terry Nolan, General Manager, Highlands Ranch Metro District
  - Lakehurst Water and Sanitation District Board of Directors
  - Barbara Biggs, Governmental Affairs Officer, Metro Wastewater Reclamation District
  - Patrick Fitzgerald, President, Metropolitan Denver Water Authority
  - Thomas M. Clark, President, Mount Carbon Metropolitan District
  - Eric W. Wilkinson, General Manager, Northern Colorado Water Conservancy District
  - W.R. "Skip" Fischer, Chairman, Adams County Board of County Commissioners
  - Gary Atkin, General Manager, Arapahoe County Water and Wastewater Authority Board of Directors
  - Gary Barber, Chair, Arkansas Basin Roundtable
  - Robert J. Brabec, President, BMR Metropolitan District
  - Board of Directors, Castle Pines Metropolitan District
  - Pamela Ridler, CCE, President/CEO, Castle Rock Chamber of Commerce
  - John Hendrick, General Manager, Centennial Water and Sanitation District
  - Larry Moore, Co-Chairman, and Kevin Urie, Co-Chairman, Chatfield Watershed Authority
  - Dan Mikesell, Interim Director, City of Aurora Water Department
  - Debbie Brinkman, Mayor, City of Littleton
  - James D. Gunning, Mayor, City of Lone Tree
  - Mike King, Executive Director, Colorado Department of Natural Resources, State of Colorado
  - Scott Lamond, President of the Board of Directors, Cottonwood Water and Sanitation District
  - James S. Lochhead, CEO/Manager, Denver Board of Water Commissioners
  - Kelly J. Brough, President and CEO, Denver Metro Chamber of Commerce
  - Bob Peters, Water Resource Engineer, Denver Water
  - Jack A. Hilbert, Chair, Douglas County Board of County Commissioners
  - David A. Weaver, Sheriff, Douglas County Sheriff's Office
  - O. Karl Kasch, Chairman, East Cherry Creek Valley Water & Sanitation District
  - Michelle Pierce, Chairman, Gunnison Basin Roundtable

- Jefferson County Board of County Commissioners
- Thomas M. Clark, President, Mount Carbon Metropolitan District
- Brian P. Dunnigan, Director, Department of Natural Resources, State of Nebraska
- Kent Crowder, Chair, North Platte Basin Roundtable
- Charles J. Krogh, District Manager, Pinery Water & Wastewater District
- Patrick Fitzgerald, District Manager, Platte Canyon Water and Sanitation District
- Plum Creek Wastewater Authority Board of Directors
- Larry D. Moore, General Manager, Roxborough Water and Sanitation District
- South Platte II Working Group
- Patrick Fitzgerald, District Manager, Southwest Metropolitan Water and Sanitation District
- Ann A. Terry, Executive Director, Special District Association of Colorado
- Bob Kellerhuis, Mayor, Town of Kersey
- Andrew Martinez, Mayor, Town of LaSalle
- Donald R. Brookshire, Mayor, Town of Severance
- Margarita Leon, Mayor, Town of Wiggins
- John S. Vazquez, Mayor, Town of Windsor
- Brett Redden, President, Upper Gunnison River Water Conservancy District
- Jeanne Hayes, President, Roxborough Park Foundation

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285, 456, 479, 491, 502, 529	Managing the release of water from Chatfield Reservoir could be an important tool" for enhancing fish and riparian habitat downstream of the reservoir (see Draft FR/EIS at 4-55 and 4-56). The problem is that in the Draft FR/EIS the management of the reservoir with any thought of downstream flow impacts appears to be purely voluntary, being only vaguely referenced as a matter to be addressed through "adaptive management." The actual adjustment of operations has a large number of hoops to jump through, and there is nothing compulsory, no public oversight, or any grievance channels described. A true mitigation plan would include a requirement for a minimum flow downstream.	Mitigation for downstream effects are part of an ongoing negotiation between the project participants and the state of Colorado and are currently being addressed with a combination of 1) commitments in the operations plan to make strategically timed releases of water from Chatfield on a best efforts basis, and 2) .5 miles of stream enhancements to the South Platte River downstream of Chatfield. The negotiations are not yet finalized and will become final with the Colorado Parks and Wildlife Commission approves the complete package of state mitigations. These efforts include activities over and above the Federally Recommended Plan.	Adaptive Management
460, 502	2.1, p. 2-4 - We agree with the statement in #4 that, “Strategically timed release of water from Chatfield Reservoir can potentially provide recreational and environmental benefits to the urban and downstream reaches of the South Platte River.” But, on the same page, 2.2.1, Planning Objectives, include only “…fully mitigating unavoidable significant impacts…” The FWCA calls on federal agencies to pursue measures to improve fish and wildlife values and adopt such measures, where appropriate, to obtain maximum project benefits. Throughout the document, timing releases of water to offset projects impacts downstream or enhance downstream resources are mentioned with no specific commitment as to whether or how these efforts would be pursued.	Mitigation for downstream effects are part of an ongoing negotiation between the project participants and the state of Colorado and are currently being addressed with a combination of 1) commitments in the operations plan to make strategically timed releases of water from Chatfield on a best efforts basis, and 2) 0.5 miles of stream enhancements to the South Platte River downstream of Chatfield. The negotiations are not yet finalized and will become final when the Colorado Parks and Wildlife Commission approves the complete package of state mitigations. These efforts include proposed activities over and above the Federally Recommended Plan.	Adaptive Management
285, 456, 502, 509, 526, 529, 537, 553, 554, 569, 605	Aspirational goals alone are not sufficient to address the potential significant environmental harm. The best way to develop a sensible and workable adaptive management process with realistic but meaningful goals is for the Corps to work with the Chatfield Project participants and the affected downstream communities , and other stakeholders, to develop cooperative, mutually agreed upon strategies for Chatfield Reservoir management that meet the goals and needs of the Chatfield participants while addressing mitigation, downstream base flow deficiencies, etc.	Mitigation for downstream effects are part of an ongoing negotiation between the project participants and the state of Colorado and are currently being addressed with a combination of 1) commitments in the operations plan to make strategically timed releases of water from Chatfield on a best efforts basis, and 2) .5 miles of stream enhancements to the South Platte River downstream of Chatfield. The negotiations are not yet finalized and will become final with the Colorado Parks and Wildlife Commission approves the complete package of state mitigations. These efforts include activities over and above the Federally Recommended Plan.	Adaptive Management
226, 227	How are adaptive management issues funded after the project is completed?	Needed adaptive management, adjustments to mitigation and implementing contingencies will be funded by the Chatfield Water Providers.	Adaptive Management

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420, 460, 507, 529, 537, 554, 605, 789, 790	What is the definition of adaptive management? What guidelines are to be followed? How will this process be monitored and controlled? Adaptive management is mentioned over 200 times in the report, but there is no definition or guidelines for it. The mitigation and adaptive management described in your official documents appears to be vague and non-specific. This is not responsible to the public in terms of fully understanding what will be lost and gained. 4.1.1, p. 4-2 - This section begins by describing a cycle of steps necessary to implement adaptive management: problem assessment, design, implementation, monitoring, evaluation, adjustment, and then recycling through earlier steps. Too often the Draft FR/EIS uses “adaptive management” as a general term to address response to uncertainty or unanticipated consequences of project implementation. In each case where adaptive management is proposed or mentioned (approximately 120 times in the Draft FR/EIS not including appendices) it should be clear what the problem is, what the design to address it consists of, what monitoring will take place, and how results will be evaluated. Table 4-1, pp. 4-3 through 4-5, includes a column entitled “Required Adaptive Management.” In most instances no monitoring is referenced, only uncertainties and possible measures that could be employed to address impacts. Despite the column title, descriptions are limited largely to ‘adaptive management will be used’ and a list of possible measures to address impacts.	An adaptive management plan has been prepared for the final FR/EIS that provides greater detail and specificity regarding the role of adaptive management. The plan provides a framework for addressing the uncertainties associated with impact estimates and proposed mitigation for the resources of concern, and also includes resource-specific monitoring and management actions addressing water quality, downstream flows and reservoir operations/fluctuations. The plan also describes the process that will be used to provide oversight of the adaptive management activities, including the entities that will be involved and their roles in oversight. Table 4-1 and associated text will be revised based on the Adaptive Management Plan, and the plan will be included as an appendix.	Adaptive Management
460	4.8.5, p. 4-86 - This section starts by stating that, “Prior to implementation of an alternative, actions to reduce the level of impacts will be considered.” The discussion immediately switches to examples of potential “adaptive management” measures. This exemplifies the Draft FR/EIS’ lack of solid commitment to a variety of measures mentioned in the document that “could” or “would” reduce or offset impacts. Appendix CC, Items of Non-Federal Cooperation, suggests that some of these issues may be resolved independent of the Federal action. We believe that all measures to reduce and mitigate impacts should be part of the Federal action.	All significant impacts identified in the EIS are being mitigated as part of the federally recommended plan. In addition, the Chatfield Water Providers and the State of Colorado are negotiating details of a state mitigation plan. While much of that mitigation plan mirrors what is required by the Federal plan, many of the items in the state mitigation plan focused on areas where impacts are not anticipated, but uncertainties exist as to potential effects to certain resources. Discussion of this can be found in Appendix K.	Adaptive Management
460	7.5.1, p.77 - The full impact of project implementation to existing vegetation from 5,439 to 5,444 feet and above may not become	This is one of the reasons there will be continued monitoring and adaptive management measures.	Adaptive Management

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	evident until a series of wet or dry years occurs. Until then, full impacts of the reallocation project and the extent of actions needed to fully mitigate impacts will not be known.		
526	The report states that adaptive management could potentially manage water levels by manipulating releases, changing timing of releases, etc. (see pages 2-84, 4-4, 4-5, 4-47, 4-86, 4-104, page 7 and 79 of Appendix K, page cc-5 and cc-6 of Appendix CC), yet in Table 4-1 the DEIS states, “In terms of hydrology, potential changes in pool fluctuations would be difficult to minimize under Alternatives 3 or 4.” (DEIS, page 4-3, my emphasis)	Changes in pool fluctuations would be difficult to minimize under Alternatives 3 and 4; however, it may be possible to manage, to some degree, pool fluctuations and this will be explored as described in Section 7.5.2 of the CMP.	Adaptive Management
460, 526, 529, 537, 623, 628, 883	What is the definition of adaptive management? What guidelines are to be followed? How will this process be monitored and controlled? Adaptive management is mentioned over 200 times in the report, but there is no definition or guidelines for it. The mitigation and adaptive management described in your official documents appears to be vague and non-specific. This is not responsible to the public in terms of fully understanding what will be lost and gained. 4.1.1, p. 4-2 - This section begins by describing a cycle of steps necessary to implement adaptive management: problem assessment, design, implementation, monitoring, evaluation, adjustment, and then recycling through earlier steps. Too often the Draft FR/EIS uses “adaptive management” as a general term to address response to uncertainty or unanticipated consequences of project implementation. In each case where adaptive management is proposed or mentioned (approximately 120 times in the Draft FR/EIS not including appendices) it should be clear what the problem is, what the design to address it consists of, what monitoring will take place, and how results will be evaluated. Table 4-1, pp. 4-3 through 4-5, includes a column entitled “Required Adaptive Management.” In most instances no monitoring is referenced, only uncertainties and possible measures that could be employed to address impacts. Despite the column title, descriptions are limited largely to ‘adaptive management will be used’ and a list of possible measures to address impacts. A significant amount of the impacts to environmental assets and recreation are a result of the expected increase in reservoir	Adaptive Management is a well structured process which includes: management objectives that are regularly reviewed and revised, model or models of the managed system, monitoring and evaluation of outcomes, mechanisms for incorporating what is learned into models guiding future decisions, and a collaborative process. This process allows to better understand the uncertainty of predicted results and therefore permits decisions to be made much earlier without definitive designs. The approach allows iterative reduction of uncertainty through refinement of actions. An Operations Plan is being developed for adaptive management. The operations plan will provide a "tool" for working together to identify strategies to reduce affects of water level flux. Worst case scenarios were considered in the EIS analysis for comparing alternatives, and ensuring full mitigation can be reasonably obtained.	Adaptive Management

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	fluctuations, and the change of timing of storage and release. A solid mutually agreed upon Coordinated Reservoir Operations Plan could dramatically decrease these impacts and the magnitude of impacts. Such a plan could decrease mitigation costs and increase certainty for the Water Providers, CPW and the Environment. The Draft Comprehensive Mitigation Plan states: During the first 3 years of operations, studies will be conducted as part of the Adaptive Management program to determine the effects of the unrestricted operations. The studies will determine if any restrictions on operations, either in the storing of water or releases of water, might lessen recreational or environmental impacts or increase benefits of the project" (Appendix K, page 80). A lot of unnecessary and irreparable damage could be done in three years. I'd like to see a plan that's a whole lot more definitive than "unrestricted operations." Open, formal procedures should be developed for altering that plan if need be. Both the plan and the procedures for altering it should be included in the Environmental Impact Statement.		
285, 537, 554	When an alternative is selected, the Corps and water providers must develop specific management plans for each of the nine resources in coordination and with the approval of Colorado Parks and Wildlife. Further, these plans should be made available for public review and comment before they are presented to the Parks and Wildlife Commission. The document mentions in several places that there are agreements in place to perform on the ground work that is outside of the DEIS. These agreements or deals should be part of the public process and in full disclosure and open to comments. While they may benefit the environment, they can be negatively viewed as back room deals to expedite resource agency or non-profit organization approvals.	A process for review of the proposed mitigation activities by Parks and Wildlife is presented in Section 7.6 of the CMP (Appendix K of the Draft FR/EIS). An adaptive management plan has also been prepared for the final FR/EIS that provides greater detail and specificity regarding the role of adaptive management (Appendix GG). Chatfield Water Providers and the state of Colorado are negotiating details of a state mitigation plan. Many of the items in this state mitigation plan are above and beyond federally-required mitigation.	Adaptive Management
576	Within the CMP, we suggest you include details of the adaptive management approach and the Coordinated Reservoir Operations Plan provisions to be developed to protect the walleye brood stock program (page 4-56).	The Adaptive Management Plan (Appendix GG of the FR/EIS) presents a general approach to development of an operations plan. The Chatfield Water Providers and the State are discussing development of a more detailed operations plan. The operations plan being negotiated between the Chatfield participants and the state of Colorado includes a provision to limit the magnitude of flow	Adaptive Management

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		releases during a specific time period when such releases could cause adverse impacts to the walleye brood stock program.	
628	Adaptive Management may be applied too broadly for mitigation, particularly where impacts are readily identifiable. There must be a more structured, concrete approach to mitigating identifiable impacts.	A conservative approach was taken in identifying impacts in order to ensure that full mitigation is identified. The CMP (Appendix J) provides the approach to implementing the mitigation identified for the worst case scenario. An adaptive management plan has also been prepared for the final FR/EIS that provides greater detail and specificity regarding the role of adaptive management.	Adaptive Management
8, 93, 102, 103, 105, 120, 134, 212, 238, 239, 280, 302, 321, 324, 340, 358, 361, 363, 368, 372, 376, 381, 384, 389, 390, 392, 396, 400, 401, 410, 414, 415, 417, 420, 433, 442, 446, 453, 464, 471, 472, 473, 478, 482, 486, 488, 489, 503, 505, 507, 509, 510, 517, 521, 524, 526, 529, 536, 537, 539, 558, 560, 581, 582, 602, 605, 610, 615, 619, 620, 622, 631, 646, 649, 653, 655, 658, 660, 665, 667, 670, 671, 674, 759, 663, 758, 801, 810, 812, 817, 876, 880, 885, 887	A full range of **reasonable alternatives was not seriously considered** or discussed in depth in the DEIS. The discussion of alternatives in the DEIS does not comply with the requirement to “objectively evaluate all reasonable alternatives” and appears to be more of an attempt to justify the alternative preferred by the project proponents and keep their costs low rather than an “objective evaluation.” Additionally, the Corps does not provide a reason it cannot evaluate the several alternatives, together, that were deemed to not satisfy the purpose and need of the project standing alone. Examples: aquifer storage and recharge, increased water conservation, gravel pit storage and/or expansion and use of existing water storage facilities in the vicinity of Chatfield such as Reuter-Hess Reservoir or some combination of these. Many other water supply projects (such as the one recently completed by Centennial Water & Sanitation District across the street from Chatfield with a yield of about 6,000 AF per year) using gravel pits and exchanges, as well as existing and new infrastructure (e.g., the WISE partnership, Prairie Waters Project, etc.) can assist in producing similar efficiencies and additional use of current supplies at a yield reasonably consistent with the proposed reallocation project.	All of the alternatives mentioned in this comment are included in the alternative concepts considered and screened, as shown in Table 2-2. The rationale for screening forward or for elimination of the 37 water supply concepts are described in Section 2.3 and summarized in Table 2-4. The DEIS did consider assembling combinations of various concepts into alternatives, particularly concepts that individually could not meet the purpose and need of the project. Chatfield has the unique and extremely valuable characteristic of on-channel storage, allowing any size flows to be instantly captured. This unique aspect makes Chatfield Reallocation more efficient and results in higher yields. This aspect of capturing what is available allows other alternatives of storage, such as groundwater injection etc., to become more viable.	Alt
411, 509	p. ES 6, 3rd para - “alternatives for the importation or agricultural conversion have vastly higher expense and increased environmental impacts compared to other alternatives" and "are very complex, high-impact projects that are feasible only if large	The quoted paragraph refers to large scale water importation and agricultural transfer concepts (DEIS action 2.3.2). These are very complex, high-impact projects that are feasible only if large volumes of yield are realized. These concepts were eliminated from further	Alt-Ag Conversion

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	volumes of yield are realized." This is patently not true for the transfer of local agricultural water rights where agricultural water can be purchased as needed on a willing seller basis at prices that enable the selling farmer to invest both in conservation (in some cases with little reduction in acreage) and in retirement. Local initiatives are much more flexible and do not require large up-front costs. Also, it is simply illogical to claim that gravel pits, where land is clearly previously disturbed, would accrue more impacts than impacts that occur to a healthy ecosystem and state park such as Chatfield.	consideration due to cost, the logistics and time constraints of obtaining water rights and legal agreements for out-of- basin transfers. Smaller scale agricultural transfers were not considered for potential water supply concepts. Typical small-scale agricultural transfer opportunities are small (100 AF/year) with sporadic availability, and therefore difficult to piece together sufficient quantities to meet the objective of the project. Also, most small-scale agricultural transfer opportunities are located downstream from the Chatfield Reservoir, therefore pipeline transport and treatment would be required. The DEIS did consider piecing together multiple small reservoirs into alternatives. In the cases of the upstream existing reservoirs and gravel pits, these concepts were eliminated from further consideration due to the limited storage capacity of each individual entity, plus the cost and logistics of combining them with other small capacity reservoirs. In the case of the lower South Platte River gravel pits; these were screened forward for detailed analysis because of their relative close proximity, sufficient storage and reasonable cost and logistics for piping and related appurtenances.	
879	Denver Water has asked us to conserve and Denver Water users have acceded to these requests. But the big users of water in the state are irrigators. Why haven't irrigators been asked to conserve as aggressively as urban users?	The agricultural users have market motivations to use their water as efficiently as possible such that they increase the return they receive for the amount of water they use. Many are switching from the more water consuming techniques to less water conserving techniques, like drip and sprinklers, but such conversions require new, expensive equipment so the conversions must be done gradually.	Alt-Conservation
93, 101, 102, 134, 152,223, 224, 249, 280, 285, 293, 300, 303, 326, 334, 337, 339, 353, 362, 372, 378, 393, 414, 420, 435, 439, 454, 464, 489, 500, 526, 529, 538, 540, 557, 580, 659, 665, 866, 884	The problem that needs to be addressed is not increasing water storage, but managing population growth and commercial/residential growth by requiring water conservation. Too much water currently gets wasted in the Metro Area right now (watering grass too much, and during hottest time of day). Suggest promoting and enforcing water conservation instead of reallocating storage at Chatfield for water supply. Current water consumption occurring in the area seems wasteful. Implementation of serious conservation measures, coupled with other alternatives (i.e. gravel pit storage, ground water recharge and recovery) could meet the purpose and need, and should be evaluated. The lack of discussion of how water conservation programs integrate with the project proponents' over-	The water resource problem being addressed in the study is the inadequate supply of water to meet increasing water supply demand in the Denver Metro area over the next 50 years due to the combined effects of population growth, depletion of nonrenewable groundwater sources, and agricultural water providers' need for augmentation water for alluvial wells. Thus, while population growth and development is considered within the context of this study, affecting population growth rates or development rates is beyond the study scope. The elements of the respective Water Conservation Program of each water provider are described in Appendix AA, summarized in Table 2-3.a of the DEIS, and presented in detail in the complete	Alt-Growth

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	all water supply planning efforts is a major deficiency in the DEIS which should be corrected in a supplement which clearly quantifies the providers' water conservation programs and discusses how these programs fit into their water supply planning portfolios. NEPA requires agencies to briefly discuss the reasons for eliminating alternatives from detailed study. The Corps simply states that conservation constitutes independent parallel action that would occur with or without the Chatfield expansion (DEIS, 2-23). The Corps is violating NEPA, because agencies cannot disregard alternatives merely because they do not offer a complete solution to the problem.	water conservation reports of seven of the water providers with state of Colorado approved plans at www.cwcb.state.co.us/conservation/relatedinformation/WCPs. In total, these efforts represent approximately 15% reduction in water use over a 10-year period of time. Water conservation goals and amounts were considered when determining the amount of water needed for future use, some of which would be provided by the proposed Chatfield Reservoir Reallocation Project. Water shortages of sustainable water supplies faced by the water providers cannot be resolved by water conservation alone. The FR/EIS evaluated various water supply concepts for use in formulating alternatives. These concepts range from simple "building blocks" that would not suffice in themselves to meet project objectives (e.g., water conservation programs, single reservoir or gravel pits) to large scale, multiple-component concepts that could meet project objectives (Colorado River Return Concept). In the cases of the Chatfield Water Provider M&I Conservation Programs and the Central Colorado Water Conservancy District Efficiency Program, these "building block" concepts were eliminated because these programs are already in place and, even with these proactive conservation programs enacted, there is still a need for additional water supply. One could view each alternative evaluated as also including the various conservation programs as components. General explanations for the elimination of potential water supply concepts from further analysis are presented in Section 2.3 and summarized in Section 2.3.8 and in Table 2-4. The DEIS did consider assembling combination of various concepts into alternatives, particularly concepts that individually could not meet the purpose and need of the project. For the example of the upstream existing reservoirs and gravel pits, these concepts were eliminated from further consideration due to the limited storage capacity of each individual entity, plus the cost and logistics of combining them with other small capacity reservoirs.	
509	Unrestricted population growth causing a shortage of water supplies is speculative and not based on recent or statistically representative data. While we can agree that water is an important resource and renewable water is preferred over non-renewable sources, this goal	In 2003, the Colorado General Assembly authorized CWCB (Senate Bill 03-110) to implement the SWSI study due to the 2002 drought, population increases, and potential water shortage issues. The SWSI study addresses population, and shows that population is	Alt-Growth

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	can be met through other alternatives – thus protecting multiple environmental resources.	expected to continue to grow in Colorado and especially the front range and that the current water supplies are not sufficient for the anticipated additional water demands.	
537	Another alternative that must be given serious attention in an alternatives analysis would be the possibility of not permitting new housing developments in the suburbs without very strict water conservation requirements for landscaping and interior use.	Limiting housing development is not a water supply alternative. Water conservation reduces future demand, but is not a source of water and as such is not considered a water supply alternative. To the extent a high level of community acceptable water conservation already exists in the sponsoring entities, it was considered as having a moderating effect on demand in the future demand projection.	Alt-Growth
666, 823	Alternative Two is the best alternative. This option is the least expensive and least detrimental to the environment. This alternative calls for future reliance on NTGW for Denver water and other upstream and metro area providers while downstream providers would store additional water in gravel pits. Water wells cause negligible long-term impact on wildlife habitat, gravel pits are already disturbed by current extraction therefore no useable habitat exists there anyway, and using the Arapahoe Aquifer would provide stronger incentive to conserve water.	Alternative 2 ultimately does not fare well in the evaluation of alternatives with respect to its overall contributions to the planning objectives; response to planning constraints; consistency with the P&G criteria; or consistency with the Corps' Environmental Operating Principles.	Alt-NTGW
285, 439	There is no reason that NTGW cannot be pursued by the water users. The DEIS presents the NTGW as a non-renewable resource that should be kept for emergency use. While it only very slowly renews, the amount of water present is vast. The reason the proponents want to discontinue its use is that it is getting more expensive to recover the water and the wells are not producing the flows they once did. Economics is the only factor keeping the proponents from pursuing NTGW further. When we first moved to Highlands Ranch 20 years ago we heard about the aquifer being able to provide water for a 100-year period. Now this is not even mentioned. Alternative 2 has the water users drilling 1,364 new wells with a stated loss of production in the aquifer up to 85 percent by 2050. How is alternative 2 a solution to long-term water needs?	The period of analysis for this study is 50 years. It was determined that non tributary ground water could provide water through that period and was accordingly a viable alternative.	Alt-NTGW
20, 28, 39, 46, 57, 59, 61, 65, 69, 75, 98, 99, 100, 111, 127, 128, 132, 135, 179-182,	Securing renewable water as this EIS evaluates is of urgent priority in the metropolitan area. Securing surface water at Chatfield eases our community’s dependence on nonrenewable water from the **Denver Basin Aquifer System**.	Comment noted.	Alt-NTGW

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184-185, 192, 193. 194, 196, 199, 200, 202, 205, 208, 209, 218, 229, 230, 243, 251, 273, 284, 304, 314, 325, 347, 356, 364, 379, 465,466, 467, 479, 481, 568, 570, 584, 585, 628, 701, 710, 721, 733, 746, 767, 775, 863, 900			
245, 353, 358, 439, 440, 493, 509, 526, 529, 536, 537, 663	The DEIS dismisses the concept of storing water in the aquifer below the primary region to be served because of the expense of transporting, treating and injecting it and the need for temporary surface storage. Yet it seems like a desirable long-term option. The water has to be transported and treated anyway. Up front expenses would likely produce savings in the long term. Very brief flooding at Chatfield or use of another site for temporary storage before injection might avoid the need for massive changes in the park. Advantages of storing water in an aquifer include: lack of evaporation, which over months or years draws down reservoirs significantly in our dry climate; minimal disturbance to the land surface; storage available in the immediate area where water is needed; and protection of stored water from polluted flood runoff, such as what happens after forest fires. Another solution would be to replenish the aquifer below the region to be served by the Chatfield Reallocation. All you are doing with expanding surface storage is creating a broader evaporation pond. You can accomplish the same amount of water supply expansion with 1/10th the underground storage without wasting water through evaporation. Denver Basin aquifers offer viable storage possibilities, there are no production losses, no observed effects on aquifers and minimal capital costs (J. Hendricks, General Manager, presentation at American Water Resources Association luncheon, December 2010). Underground storage avoids the water losses to evaporation which are a major drawback of the “preferred alternative.” An alternative	The Corps considered the evaluation of ground water injection done during the screening process to be adequate. Evaporation and water quality were taken into consideration on the alternatives considered in detail. The positive attributes of aquifer recharge and storage are acknowledged, including avoidance of evaporative losses, minimal production losses, and minimal adverse affects to receiving aquifers. However, the Bedrock Aquifer Conjunctive Use concept was eliminated from further consideration as an alternative due to the necessity (and associated logistics and costs) of constructing an interim storage structure to capture surplus surface flows and the cost and logistics of constructing a treatment, injection and pumping system. The Alluvial Aquifer Conjunctive Use concept was eliminated due to limited alluvial aquifer storage availability in the area of the project, and the necessity (and associated cost and logistics) of locating and constructing alluvial aquifer recharge basins. Chatfield Reallocation is a project that would potentially provide the means to capture available flows from the stream for the slower movement of such water into an injection system. Thus, injection can be developed in addition to the Chatfield project in the future but not as a direct replacement of the project.	Alt-NTGW

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	that includes it might have to include more pipelines and treatment facilities (see Criterion LT-5, Table 2-1, p. 2-10) but Alt. 1, 2 and 4 would also require such facilities and were not eliminated for that reason. Thus the failure to include an alternative with this component is a major deficiency of the DEIS.		
509	Renewable water is preferable to NTGW; yet, there are many solutions to this ongoing problem – and this project is hardly going to solve this issue. As a matter of fact, the majority of water providers involved in this project already have little to no dependency on NTGW and no plans for additional NTGW wells. The alternatives that include NTGW cannot be claimed as more viable than other alternatives.	As discussed in Section 2.3.4 of the Draft EIS, there are 7 participants in the project who are at least 85% dependent on Non-Tributary Groundwater. Several are 100% dependent. In 2005, some 30,000 AF were pumped from the groundwater aquifers by these entities. These entities are growing and will be drilling and using more NTGW wells if they are not able to develop alternative surface water supplies.	Alt-NTGW
525	Tying the whole study to the importance of lessening the dependence on nonrenewable groundwater is preposterous as none of the 15 water providers have given up their use/rights of groundwater with any of the alternatives.	The participants who use NTGW will be able to use less groundwater if they are able to develop new surface water supplies from this project. Thus their dependence on a non-renewable resource will be reduced, but probably not eliminated.	Alt-NTGW
537	Alternative 2 (the least costly alternative to Chatfield Reservoir storage reallocation) would combine continued use of non-tributary ground water (NTGW) with storage in gravel pits. Unfortunately, the DEIS states, “However, the water providers participating in the Chatfield Reservoir reallocation study are opposed to long-term use of NTGW due to water supply management strategies of becoming less dependent on non-renewable water supplies.” It must be noted that despite this statement, some entities continue to permit new housing developments on the basis that there is sufficient ground water supply. Therefore, is this also an unrealistic alternative, or is it one the Corps will seriously consider in view of the much greater environmentally damaging Alternatives 3 and 4?	For this study, it is assumed that NTGW could provide water to a significant part of upstream water providers' water needs through the 50-year planning period. It is clearly a resource that is currently utilized by the existing upstream water providers. For some, up to 100% of their existing supplies come from NTGW source.	Alt-NTGW
570	We question the validity of the assumption that NTGW will be available for all Water Providers throughout the 50-year planning period considered in the economic analysis (Draft FR/EIS, page 2-24). It will likely not be physically possible for upstream providers near the edge of the aquifer to use NTGW through the full period of analysis, and the Draft FR/EIS should not assume that their water needs will be satisfied with NTGW (Draft FR/EIS, pages 2-61; 5-18).	The Corps understands the reasoning for being reluctant to identify NTGW as a true alternative. Although it is a nonrenewable resource, NTGW is assumed to be available for the 50-year planning period considered in the economic analysis. Colorado statutes restrict pumping of NTGW to no more than 1 percent per year, thereby providing a theoretical aquifer life of 100 years, although due to pumping cost the economic life might be shorter. As the SMWSS report describes, the projected pumping volume will dissipate the	Alt-NTGW

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		artesian pressure from the Denver Basin aquifers to a large extent over the next 10 to 20 years. The problem with continued pumping of the Denver Basin aquifers is related to a significant drop in the rate of well production (the gallons per minute of withdrawal) and not to the diminishment of total water stored in the aquifers. Regardless, the aquifer is assumed to be available for 50 years, and the NTGW is retained in the analysis in conjunction with storage for downstream providers (gravel pit surface storage). Because it is currently heavily used, and its theoretical life is 100 years, and it is a relatively inexpensive alternative to surface water development (albeit pumping and infrastructure costs may increase in the future due to dissipating artesian pressures, etc.) the Corps believes it is a reasonable alternative (see page 2-23 "Use of Non-Tributary Groundwater (NTGW)" discussion.	
570	We believe Chapter 4's discussion of Socioeconomic Impacts (Draft FR/EIS, pages 4-120 to 4-121; 4-159 to 4-160) affords a superficial treatment of the socioeconomic impacts attendant to continued reliance on NTGW resources. The Hydrology Section identifies many of the concerns related to the eventual loss of groundwater as an economically viable resource (Draft FR/EIS, pages 4-31 to 4-35). We request that those considerations be identified as part of the indirect socioeconomic consequences under Alternative 2.	The period of analysis for this study was 50 years. It was determined that non tributary ground water could provide water through that period and was accordingly a viable alternative. Other than a slightly higher cost of water, no socioeconomic effect was identified.	Alt-NTGW
570	There is no factual support for the assumption that Alternative 2 is technically and economically reasonable for consideration in supporting the purpose and need of increasing availability of water sustainable over the period of analysis (Draft FR/EIS, page 2-30 (initial screening criteria)). The assumption that Alternative 2 is "effective" in alleviating the identified problems and meeting the planning objectives under the P&G criteria (Draft FR/EIS, pages 5-15 to 5-16) also is contrary to known facts. One of the three identified problems is "[r]eliance of some municipal water providers on non-renewable Denver Basin groundwater," in recognition that the use of Denver Basin groundwater for municipal water supplies "has been determined to be an unacceptable long-term supply due to a path of severely increasing costs and the problems of currently reduced water availability and reliability that will continue to worsen	The period of analysis for this study is 50 years. It was determined that non tributary ground water could provide water through that period and was accordingly a viable alternative. Alternative 2 ultimately does not fare well in the evaluation of alternatives with respect to its overall contributions to the planning objectives; response to planning constraints; consistency with the P&G criteria; or consistency with the Corps' Environmental Operating Principles for the basic reasons identified in this comment.	Alt-NTGW

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	in the future" (Draft FR/EIS, page ES-4). One of the planning objectives is to "become less reliant on non-renewable groundwater by utilizing renewable water supplies, thus extending the availability and life of these critical aquifers for use by future generations" (Draft FR/EIS, page ES-5). Continued use of NTGW under Alternative 2 is simply not responsive to the above-described problem or planning objective. For the above reasons, we believe that Alternative 2 is portrayed in an overly optimistic manner in the Draft FR/EIS.		
144, 206, 213, 274, 330, 360, 383, 418, 419, 437, 493, 504, 520, 529, 537, 555, 556, 571, 587, 588, 600, 605, 616, 675, 698, 703, 705, 706, 722, 787, 792	The Penley Reservoir alternative is flawed and should not be considered a viable alternative. Why was it even considered despite its' planners having dropped it almost a full year prior to publication of the DEIS?	Penley Reservoir was proposed by local sponsors as a project they would pursue in the absence of the reallocation of Chatfield Reservoir. Accordingly, it was considered in the analysis. The Penley Reservoir concept was screened forward for detailed analysis as an alternative due to its reasonable cost potential, upstream storage body with sufficient volume, and minimal environmental impacts. The detailed analysis indicated that Penley Reservoir is a viable alternative although less consistent with the Corps' Environmental Operating Principles and more expensive than the Recommended Plan.	Alt-Penley
407, 428, 459, 577	Alternative 4 (reallocation of 7,700 AF) or something less should be considered, as it would provide a compromise for some new storage, but wouldn't have near the impacts to the park as the 20,600 AF reallocation.	Several alternative concepts were initially developed and screened using the Corps' Planning process. While many alternatives were eliminated from further detailed evaluation, the screening process did lead to the refinement of four main alternatives, including reallocation of 7,700 AF at Chatfield. The alternatives are discussed in detail in Chapter 2 of the FR/EIS. Each of the four alternatives was evaluated using the Corps' Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (USACE, 1983). The P&Gs call for a project to be evaluated on the following criteria: completeness, effectiveness, efficiency, and acceptability (as defined in ER 1105-2-100). The evaluation includes both environmental and economic impacts, environmental and economic benefits, and project costs. Each alternative was formulated on the basis that each would provide 8,539 acre-feet of average year yield (equivalent to maximum reallocation alternative 3). While Alternative 4 does have less impacts directly to Chatfield, other environmental impacts and costs are associated with making up additional yield to provide a total of 8,539 AF of average year yield. In considering all the	Alt-Reallocation

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		information contained in the impacts and benefits analysis, the Corps considers Alternative 3 the preferred alternative.	
416	You should plan for twenty (20) feet or thirty (30) feet, whatever the maximum that can be placed in Chatfield and locate the capital improvements (buildings, etc.) that cannot be physically relocated later to outside this perimeter so we and future citizens do not need to pay again for these adjustments the next time a reallocation might take place.	Brown and Caldwell (2003) completed an initial preliminary screening study for this project that looked at a number of aspects of reallocation within Chatfield Reservoir including water rights, use patterns, demands, and water level fluctuations in terms of four alternatives. The 20,600 Acre-Foot Reallocation (5,444 feet msl) and 7,700 Acre-Foot Reallocation (5,437 feet msl) alternatives were retained for full analysis. The 20,600 Acre-Foot Reallocation Alternative was selected because it was considered a reasonable maximum reallocation storage volume based on flood risk management and modification of recreational facilities. This is discussed in Section 2.3.6 of the report entitled "Storage Expansion and Reallocation Concepts for Chatfield Reservoir."	Alt-Reallocation
140, 174, 560	Why not dredge the bottom of the lake to a depth suitable for the additional storage needs, and use the dredged material to cover the rock that covers the face of the dam?	Dredging to provide 20,600 acre-feet of additional storage would require removal of over 33 million cubic yards of material, more than twice the amount of fill in the existing Chatfield Dam embankment. It would be extremely expensive to dredge and dispose of that amount of material.	Alt-Reallocation
35, 65, 118, 124, 129, 130, 132, 192, 197, 200, 201, 202, 215, 225, 228, 232, 234, 250, 251, 252, 253, 255, 268, 274, 284, 295, 313, 314, 329, 375, 388, 479, 481, 518, 522, 545, 546, 551, 570, 573, 574, 584, 628, 707, 745, 760, 764, 824	A reallocation at Chatfield represents a much needed water supply opportunity for the Front Range. It helps alleviate a **growing shortage of water in this region** - commercial and residential growth continue to put a burden on the long-term availability of existing water supplies.	Comment noted.	Alt-Reallocation
35, 37, 55, 59, 87, 114, 118, 124, 127, 129, 130, 136, 137, 156, 179-182, 184-185, 192, 193. 194,	Logical, cost effective solution - Reallocation at Chatfield **makes better, more efficient use of an existing facility** for improving water supplies vs. creating a new facility.	Comment noted.	Alt-Reallocation

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196, 199, 200, 201, 205, 208, 209, 217, 222, 225, 229, 232, 230, 243, 250, 252, 253, 255, 274, 295, 296, 3584, 13, 314, 329, 330, 347, 375, 428, 465,466, 467, 481, 518, 545, 568, 570, 585, 616, 689, 685, 686, 687, 690, 692, 693, 694, 696, 697, 698, 699, 703, 706, 707, 708, 709, 710, 711, 712, 714, 715, 717, 718, 719, 721, 722, 723, 725, 726, 727, 728, 729, 731, 732, 734, 735, 738, 739, 740, 741, 743, 747, 756, 757, 761, 762, 763, 766, 770, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 793, 790, 852, 853, 854, 858, 862, 863, 868, 872, 877, 890, 893, 896			
73, 76, 77, 99, 100, 118, 124, 129, 130, 137, 139, 197, 200, 201, 205, 215. 228, 218, 222, 225, 232, 234, 243, 252, 253, 255, 268, 284, 295,	Additional storage such as that provided by Chatfield, in addition to conservation measures, could be **critical for stakeholders during drought years**. In addition to implementing conservation measures, the reallocation helps enhance the ability to reuse and recycle water.	Comment noted.	Alt-Reallocation

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313, 314, 329, 347, 375, 461, 468, 469, 470, 476, 479, 481, 518, 522, 551, 570, 573, 574, 651, 689, 694, 699, 702, 704, 708, 710, 712, 714, 716, 718, 719, 720, 721, 723, 724, 727, 729, 734, 738, 739, 740, 747, 757, 761, 763, 766, 770, 772, 773, 775, 776, 777, 778, 780, 781, 783, 784, 793, 890, 893			
91, 99, 100, 118, 124, 129, 130, 139, 201, 202, 222, 225, 232, 251, 252, 253, 255, 295, 313, 314, 375, 388, 468, 469, 470, 476, 481, 518, 520, 522, 545, 546, 570, 573, 574, 584, 689, 690, 692, 694, 699, 708, 710, 712, 714, 715, 718, 719, 723, 727, 729, 734, 738, 739, 747, 757, 761, 763, 766, 770, 772, 773, 775, 776, 777, 778, 780, 781, 783, 784, 793	In wet years without additional storage on the South Platte River, considerable amounts of surface water cannot be captured before it flows downstream. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as **20,600 acre feet of South Platte River water in wet years to out-of-state flows.**	Comment noted.	Alt-Reallocation
526, 578, 623	At Chatfield, dependable yield from “natural” sources is zero. A study covered in the presentation examined 82 reallocations at 29 lakes and found an average annual cost per acre-ft of $230, with a range of $50 to $980 per acre-ft. Using the same costing methods,	It is true that there is a relatively high cost of storage and the very low yield to storage ratio compared to many other reallocations completed across the country. At Chatfield, yield is not simply a factor of precipitation and runoff, of which Denver receives 14	Alt-Reallocation

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	the average annual cost for storage at Chatfield would be $14,300 per acre-ft (2009 prices). One would think that these fundamental observations might prompt the Corps to conclude that Chatfield Reallocation is not a worthwhile project to pursue. Instead the Corps decided to issue a policy waiver to reduce the price it charges for storage. This change obviously makes the project appear more favorable than it really is, biasing the results toward the preferred alternative. Because of inadequate planning, water providers are proposing to ruin the richest habitat in one of Colorado's most popular state parks so they can create a 20,600 acre-foot storage pool that will be used to store, on average, only 8,539 acre-feet of water (41% of increased capacity) – none of which is from dependable flows. As if getting nothing dependable for this destruction weren't bad enough, the memorandum goes on to suggest that project costs be shared with U.S. taxpayers. Burying that zero dependable yield estimate in Appendix BB is disingenuous.	inches annually on average. It is also a factor of water rights, of which the water users are relatively junior. Most reallocations have been completed in eastern states, where water rights are much less of a factor of yield. The exception would provide that the updated cost of storage calculation consider the percent of new water supply storage space that is able to be utilized over the period of record with regard to total inflows. As such, it would make the accounting of updated cost of storage more equitable with reallocations in other parts of the country with regard to reliability, and maintain the federal government's policy of selling storage space, not water. Because a majority of water rights available for storage in Chatfield relies on relatively junior priorities and must be captured at times when flows are relatively high, such flows will be on the order of hundreds or even thousands of cubic feet per second. Diverting this rate of flow from the South Platte River for the short time when it is available would require massive pump stations and huge pipelines. This is why off-stream reservoirs are fairly limited in their feasibility and cost-effectiveness in comparison to storing high flows in the immediate on-stream capacity of Chatfield. It is reasonable for the Corps to work together with local sponsors in order to reasonably accommodate water supply at existing federal facilities, as it is specifically mentioned to do so in the 1958 Water Supply Act.	
529, 623	“If we can lower the antecedent flood (inflow design flood) by 10% we can carve out the 20,600 AF additional storage space” (comments by Doug Clemenson, USACE, Minutes of Cooperators meeting, 6/22/05). At best this is cheerleading for the project, at worst an indication that data would be manipulated to reach the desired result. In fact the antecedent inflow design flood was lowered from 50% to 40%. This is yet more evidence of bias in favor of the providers’ preferred alternative.	Refer to Appendix R - Antecedent Flood Study for justification to lower the antecedent flood pool. If reallocation of storage can be made from one purpose to another with no significant affect to meeting that authorized purpose, it is allowable, and in fact, the Corps should investigate ways to work with local entities if possible. The 1958 Water Supply Act authorizes the Corps to work together with local sponsors in order to reasonably accommodate water supply at existing federal facilities.	Alt-Reallocation
529, 623	The Corps waiving the requirement to build the relocated recreational facilities above the 10-year flood pool, which reduces the costs of dredging and filling for Alt. 3 (App. BB) shows that the study is biased for the preferred alternative.	Accommodating facilities in this way would allow new facilities under a reallocation to be more reasonably accommodating for users of the reservoir, especially as the recreation is shoreline oriented. The 1958 Water Supply Act authorizes the Corps to work together with local sponsors in order to reasonably accommodate water supply at existing federal facilities.	Alt-Reallocation

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537	A new preferred alternative is necessary. It should focus on minimizing pool fluctuations, impacts to the riparian and wetland habitats, and degradation of water quality and the sport fishery both in the reservoir and downstream. Such revised alternative should be circulated in a Supplemental DEIS. Emphasis should also be on commitment to water conservation by the water providers.	A conservative approach to the impact analysis was taken to reflect the maximum potential impacts that might be associated with the inundation of environmental resources. This worst-case scenario approach was taken to ensure adequate mitigation could be planned and subsequently reasonably attained for any potential impacts that may develop. However, this approach has not precluded identification of efforts to minimize effects via adaptive management. An adaptive management plan has been prepared for the final FR/EIS that provides greater detail and specificity regarding the role of adaptive management. The plan provides a framework for addressing the uncertainties associated with impact estimates and proposed mitigation for the resources of concern, and also includes resource-specific monitoring and management actions, including the following: Reservoir Operations Plan (water level and water release management); Tree Clearing; Weed Control; Water Quality; Downstream Flows and Aquatic Habitat effects.	Alt-Reallocation
271, 310, 365, 525, 661, 672, 799, 807, 808, 811, 817, 867	There is a need for water in the Denver metro area, but Chatfield is not the answer. The Colorado Water Conservation Board (CWCB) and the residents of Colorado, would be best served with new infrastructure that has the capacity to serve the needs of Colorado. New reservoirs, such as Two Forks or other large reservoirs, should be pursued for their recreational and storage benefits.	It is correct that Chatfield is not the answer to meeting all of the needs in the Denver metropolitan area. The CWCB's "Statewide Water Supply Initiative" (SWSI) estimates the state's population will be between 8.6 and 10.3 million in 2050. The SWSI includes several "Identified Projects and Processes" (IPPs), including the Chatfield Reallocation Project, to meet the needs of the Denver metro area. Even with the IPPs, it is expected that a significant gap in water supply availability would remain (potentially 262,700 to 435,000 acre-feet). This study is only one component in the overall effort to meet the water supply needs of the greater Denver area, and as such, would only contribute to meeting a portion of those needs. This is discussed in Section 1.6 of the report entitled "Purpose and Need."	Alt-Storage
103	There is no need for storage at this time, as there is plenty of upstream storage that serves the Denver Metro area.	The SWSI report addresses the additional water yields needed to meet the growing water demands. Storage is the mechanism where water in times of abundance are captured and made available for times of shortage.	Alt-Storage
105, 263, 269, 302, 322, 340, 361, 376, 377, 381, 384, 389,	The preferred alternative (#3) is the MOST environmentally-damaging alternative, whereas federal law – the Clean Water Act – specifies that only the LEAST damaging alternative is	The commenter appears to be referring to Section 404 of the CWA and the 404(b)(1) Guidelines associated with the Corps' Section 404 permitting process. The 404(b)(1) Guidelines are the substantive	Alt-Storage

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410, 453, 454, 464, 486, 503, 521, 524, 529, 532, 537, 539, 557, 558, 561, 572, 602, 615, 647, 648, 650, 654, 658, 660, 669, 663, 798	permittable. See Table 2-9 in Chapter 2. Other less damaging alternatives exist.	criteria used to evaluate discharges of dredge or fill material into waters of the U.S. under Section 404 of the CWA. The reallocation of storage in Chatfield Reservoir (the Corps' action and subject of the FR/EIS) will not involve the discharge of dredge or fill material into Chatfield Reservoir. The action involves the Corps making a determination that the reallocation of storage is feasible and economically justified. The Corps and EPA, the federal agencies charged with implementing Section 404 of the CWA, have consulted on this issue and determined that reallocation is not subject to the 404(b)(1) Guidelines. Appendix W of the draft FR/EIS addresses how activities that involve a discharge of dredged or fill material into a water of the U.S. comply with the guidelines.	
183, 210, 310, 363, 459, 529, 577, 578, 598, 605, 871	The Chatfield area contains a tremendous amount of “water infrastructure” (dams, diversions, pipelines, reservoirs, gravel pits, etc.) which should have been evaluated as potential alternatives to Chatfield storage. Why not look into raising the water levels of all the lakes around the Denver and surrounding area rather than at Chatfield. I've always thought the area north of Titan Road, west of the railroad tracks, east of Park Road and south of the main reservoir along the Plum Creek watershed would make a great storage area. If a small dam structure was made on Plum Creek prior to Chatfield's reservoir a lot of water could be stored without impacting the water levels on Chatfield Dam. None of the recreation area, trees, existing roads would be impacted. The Highline Canal already passes through the area and could divert water into the new structure. The water quality would be better for drinking as the human and animal activity in Chatfield would not be an issue. There would be less of a threat from burn area contamination in a separate facility. We think that the existing 40 odd sand pits downstream of Denver, and upstream of Aurora's Prairie Collection system, must be used as recapture reservoirs for any water stored in Chatfield and released in a regimen to protect the South Platte River.As a potential alternative, I have a gravel pit on the Plum Creek side. And I've had an engineering study done on it. And supposedly, if you max it out, it would do 11,000 acre-foot of water storage. Maybe as an alternate, we go with the smaller five-foot level increase; add the gravel pit storage; and then the level of the lake could be maintained	A number of "water infrastructure" concepts in the Chatfield area were considered. These are described in Section 2.3.5 and Table 2.2 of the DEIS. Many of the existing reservoirs could not be considered due to limited storage capacity or other storage commitments. One concept (Penley Reservoir) was carried forward for detailed analysis because, in part, there was potential storage capacity. The DEIS did consider piecing together multiple small reservoirs into alternatives. In the cases of the upstream existing reservoirs and gravel pits, these concepts were eliminated from further consideration due to the limited storage capacity of each individual entity, plus the cost and logistics of combining them with other small capacity reservoirs. In the case of the lower South Platte River gravel pits, these were screened forward for detailed analysis because of their relative close proximity, sufficient storage and reasonable cost and logistics for piping and related appurtenances. In addition, the fact that such facilities exist does not mean they are not already fully utilized by their owners and therefore not available for new diversion or storage of water. All entities are motivated to make full use of their facilities. The ARS gravel pits were identified in the report, and can be found in table 2-2. It was eliminated due to limited storage capacity, and the logistics of combining with the other small capacity reservoirs in the area (table 2-4).	Alt-Storage

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	fairly constant with the fluctuations being in the gravel pit; in an engineered storage vessel that has in the neighborhood of three-to-one slopes with rock walls, rip-rap walls. It would be minimal amount of disruption and visual problems.ARS, Inc., indicated his interest in using his gravel pit as an offsite location, and I have heard him quoted as saying that there is a potential 10,000 acre feet capacity. The location of ARS being directly adjacent to Plum Creek, and within a few hundred feet of Chatfield Reservoir, could allow for 50% of the reallocation amount, and it could be filled with a diversion from Plum Creek, or a relatively modest pumping system from Chatfield.		
529	Project WISE (which could eventually provide 60,000 acre-feet per year) and storage in Rueter-Hess Reservoir (email Greetz to Gwyn Jarret, Feb. 22, 2011) should be evaluated as possible alternatives to Chatfield. However, both those were eliminated without substantial analysis.	The WISE Partnership is close to securing a water delivery agreement between Denver Water, Aurora and SMWSA to deliver on average up to 7,000 acre-feet of water. It is important to note that the WISE Partnership provides a new renewable source of water to the participating SMWSA members. It is not a storage project. The Chatfield Reallocation is a storage project that allows participants to implement their reuse plans. Not only do the WISE Partnership and the Chatfield Reallocation projects serve different purposes, but the timeline, configuration of necessary infrastructure and deliveries for WISE to be successful are fully independent of any operations of Chatfield Reservoir by participating Water Providers. Finally, no pipeline is currently proposed to connect Chatfield Reservoir to Rueter Hess Reservoir. WISE now is planned to develop 7,000 AF/yr of water by massive pumping and treatment to wastewater effluent. This amount may increase but there is no guarantee. Likewise, Chatfield is planned to provide 8,000 AF/yr. Neither of these projects satisfies the overall need; they are simply pieces of the solution. This project will be part of a regional solution for water supply but does not alone satisfy the 90,000 AF regional needs for new water supplies.	Alt-Storage
529	The link between some Chatfield providers and Project WISE water storage in Rueter-Hess and storage in Chatfield has been ignored in the DEIS. The relationship between these two efforts must be addressed.	The Water Infrastructure Supply Efficiency (“WISE”) Partnership is a regional water supply project that is contemplated to provide eleven members of South Metro Water Supply Authority (water providers in Douglas and Arapahoe Counties) treated water from Denver and Aurora Water. The SMWSA is a leading regional water authority	Alt-Storage

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		whose mission is to assist its members in planning, sourcing and implementation of sustainable water needed to transfer off of the non-renewable groundwater resources which they are currently dependent. The WISE Partnership is an independent project from the Chatfield Reallocation project. Both projects are key to planning efforts to secure a reliable, sustainable water resource for the entities of SMWSA participating in both. Current forecasts demonstrate that in order to continue providing reliable water to their constituents, SMWSA members must bring 48,420 acre-feet of renewable, sustainable water into their service area by build out (SMWSA Masterplan, 2009). To meet these anticipated demands and decrease the draw on the non-renewable Denver basin aquifers, SMWSA members must take a multifaceted approach. The WISE Partnership provides a supply of renewable water from Denver and Aurora to SMWSA members. WISE water is a permanent, yet variable water supply. Some SMWSA members hope to use Rueter-Hess Reservoir storage as a way to manage this variability. The Chatfield Reservoir Reallocation is a storage project. Water stored in Chatfield is most likely to be return flows from groundwater supplies that will allow some SMWSA members to implement their reuse plans. In a few cases, members participating in the WISE Partnership are also participants seeking storage in the Chatfield Reservoir Reallocation. Their participation in both projects is key to securing a reliable resource for their constituents as these members need to implement reuse (through Chatfield storage) and secure a source of renewable water (the WISE Partnership).	
529	Storage in Rueter-Hess Reservoir was dismissed because “Parker WSD has no plans to make this reservoir available” (Table 2-4, p. 2-30). No evidence is given that the providers discussed Rueter-Hess water storage with Parker WSD except this brief negative statement, and the statement is contrary to published reports on Rueter-Hess: "The 45,200 ac.-ft. excess capacity [above needs of Parker, Castle Rock, Castle Pines and Stonegate] will be available for sale, the revenue of which will help reduce PWSD debt." (Colorado Public Works Journal, Vol 6, Issue 3, January 2010).	Parker WSD owns and manages the Rueter-Hess Reservoir while the town of Castle Rock, Castle Pines North Metropolitan District and Stonegate Village Metropolitan District own capacity. Rueter-Hess Reservoir at its expanded size is anticipated to primarily meet the needs of Parker WSD in serving its customers. Since completion of the expansion in 2012, Parker WSD has not made any additional capacity available for sale. Unlike Chatfield Reservoir, Rueter-Hess is not located on a stream and still requires infrastructure for any inflows and outflows from the dam. This, in addition to the location of the reservoir, makes Rueter-Hess not a viable storage vessel for the majority of the participants in the Chatfield Reallocation project.	Alt-Storage

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537	We understand that the providers have been considering conjunctive water use and trading of water rights. Why is this option not disclosed in the alternatives section?	The following text was added to section 2.3.4. Conjunctive use and perfection of water rights will likely be a pursuit of water providers in the future, and although the conjunctive use alternatives are screened from further analysis in the EIS, it doesn't preclude water providers to use storage in Chatfield in combination with ground water use and injection/ and or trading/perfecting of water rights. The municipal participants in this project are entities that have developed or are developing conjunctive use systems of both surface water and groundwater. In the years when this project does yield lesser amounts of water, those entities will use their NTGW to provide the reliability of supply their customers expect. For these entities, a primary motivation for the project is to decrease dependence on NTGW whenever that is possible. By utilizing surface water from this project when available, it stretches out the availability of NTGW for use in droughts.	Alt-Storage
578	Cherry Creek and Bear Creek should be considered in conjunction with Chatfield to provide the water.	Cherry Creek and Bear Creek are two additional flood control reservoirs operated by the Corps of Engineers that have the primary purpose of remaining nearly empty to capture the unexpected major flooding event. To determine if the storage space at these reservoirs could be reallocated to water supply purposes in addition to flood control purposes, would take their own new and complex set of studies. Preliminary indications are that there is no room in Cherry Creek to reallocate storage space and the water supply water storage space in Bear Creek is a relatively small volume, not justifying the effort.	Alt-Storage
605	Many of the 15 Water Providers are currently indicating that they will be partners in the WISE project. Is it possible that some are double dipping – requesting both WISE and the Reallocation, but only needing one or the other?	The study recognizes that Chatfield has the potential to provide only a part of the total future water supply needs of the area (approximately 9,000 AF of the area's need for 90.000 AF). Some project participants may attempt to fulfill some or all of their needs from the combination of both projects. Other participants can only gain benefit from only one or the other projects (for example, the agricultural participants).	Alt-Storage
628	Who will bear the loss of any storage space caused by sedimentation?	There is a pool specific to storage of sediment that already exists within Chatfield. Table 2-5 compares these pool levels and volumes under each alternative.	Alt-Storage

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647, 659, 807	Changes authorized purposes of Chatfield from flood control, recreation, fish & wildlife to water storage.	While a reallocation would reallocate 20,600 AF of flood control storage to M&I water supply storage, other authorized purposes would remain at Chatfield. The project is planned to mitigate for fish and wildlife impacts, modify recreational facilities, and demonstrate that flood control is not impacted for this reason.	Authority
114, 124, 128, 129, 130, 136, 137, 139, 192, 201, 217, 225, 232, 234, 252, 253, 255, 296, 313, 314, 375, 379, 461, 468, 469, 470, 476, 481, 545, 573, 574, 584, 692, 693, 694, 695, 699, 704, 708, 710, 712, 714, 715, 718, 719, 723, 729, 734, 738, 739, 747, 761, 762, 763, 766, 770, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 793	The project **does not affect flood capacity.**	Comment noted.	Authority-FC
355, 411, 501, 558	That the "impact on downstream flood frequency is negligible" is not clearly demonstrated. I am concerned about the reduction in capability of Chatfield to contain the 500-year flood. As we have seen in the Red River, Missouri River and others, the frequency of 100-year events appears higher than that, and with climate change it is hard to predict the impact on amount of water, though it is widely recognized that weather will become more extreme.	Chatfield was designed to control a flood larger than a 500-year event. With the reallocation it will still have capacity to control a flood large than a 500-year event. There would be negligible impact on the ability to control a 500-year flood.	Authority-FC
160, 605, 791	We don't remember water supply being mentioned [as a purpose] in 1975. The state and its citizens have invested heavily in the development and use of this resource, and have acted in good faith on the contract with USACE to utilize the park to its maximum recreational and habitat potential. Reallocation Alternatives 3 & 4 are in essence a breach of contract (perhaps implied rather than	Congress authorized USACE to conduct a reallocation study and reassignment of storage in Chatfield Lake project to joint flood risk management (flood control)- conservation purposes, including storage for municipal and industrial (M & I) water supply, agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement under Section 808 of the Water	Authority-WS

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	express) of the use of the state park.	Resources Development Act of 1986 (P.L. 99-662), as amended by Section 3042 of the Water Resources Development Act (P.L. 110-114). In addition, the Water Supply Act of 1958 authorized the Corps to include Municipal and Industrial (M&I) water supply for present and future demand at Corps reservoir projects. This act is the primary vehicle for Corps of Engineers involvement in water supply storage.	
159	The Permit to Reallocate and Construct should be denied because of unaddressed environmental concerns to T&E species downstream in Nebraska in the Central Platte River. This stems from inadequacies and failures within Colorado's various Tamarack Projects. I believe Colorado was granted an exception to the CA and PRRIP. This was simply an exception not to provide water in drought years. It was not a wholesale exclusion, exemption, and exoneration relieving them of responsibilities and obligations of the ESA, CA, and PRRIP. While the Nebraska Department of Natural Resources applauds the efforts to find tools to assist water management, as the lead representative for the state of Nebraska on the Governance Committee for the Platte River Recovery and Implementation Program (PRRIP), the Department is concerned that the proposed project in Colorado may have an impact on the flows at the Nebraska state line. Further reductions to these flows would have the potential to create a greater burden for Nebraska in implementing its PRRIP New Depletion Plan. To ensure that the regime of the river is preserved and Nebraska is not burdened with additional ESA compliance obligations now or in the future, Nebraska wants to be assured that any depletions of streamflow at the state line resulting from this project will be balanced with the necessary accretions, such that flows that would have been available under July 1, 1997 levels of development are maintained. Similarly, this analysis should also determine any potential for increased flood stages at the Nebraska state line due to the decrease in available flood pool storage at Chatfield Reservoir. Chatfield Project should be considered with NISP and other Front Range projects in order to better account for depletions to the Central Platte River… every lost cfs counts towards the river's ability	The Corps and FWS are consulting under Section 7 of the ESA regarding impacts to T&E species. The Corps prepared a draft Biological Assessment (BA) which address that and was included in the draft FR/EIS (Appendix V). Impacts to T&E species using the central Platte River in Nebraska and their designated critical habitat are addressed in the draft BA. The Chatfield Water Providers intend to rely on the provisions of the Platte River Recovery Implementation Program (Program) to provide ESA compliance for potential impacts to these T&E species and whooping crane critical habitat. As stated in the draft BA, the Corps intends to require, as a condition of any approval, that the Chatfield Water Providers fulfill required responsibilities required of Program participants in Colorado, which includes participation in the South Platte Water Related Activities Program (SPWRAP). All of the Chatfield Water Providers are members in good standing of SPWRAP. As stated in the BA, the Program, established in 2006, is implementing actions designed to assist in the conservation and recovery of the target species and their associated habitats along the central and lower Platte River in Nebraska through a basin-wide cooperative approach agreed to by the states of Colorado, Nebraska and Wyoming and the Department of Interior. The FWS has determined that the state of Colorado is in compliance with its obligations under the Program.	Central Platte

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	to scour cottonwoods from the channel and keeping fragmites from becoming established. Minimum flows, seasonal high flows, sediment loads, and geomorphology are all concerns regarding cumulative effects of water supply projects in the Front Range. New projects [such as Chatfield] need to also contain an environmental pool. One similar to the EA contained in Lake McCounaughy. Solid pools that can be called upon when conditions are right. When high flows are eminent, USFWS will need to be able to call upon these pools to create a satisfactory scouring flow.		
159	[regarding central platte flows] Figure 4-13 found under Environmental Consequences, Chapter 4, 4.5.4, page 4-55; Adobe's page number 321 of the PDF deserves more than a quick glance. The first thing that stood out to me was down ticks in stream flow during the spring and fall migration seasons. This is contrary to USFWS recommendations, for some of the higher flows are for migration. But, there is a slight uptick in July; my hopes are that all the terns and plovers have fledged and are able to move to higher ground.	The Platte River Implementation Program (Program) manages the habitat conserved for the T&E species using the Platte River and its associated habitats in central Nebraska, including nesting habitats for piping plovers and least terns. Projects with depletions to the Platte River are not evaluated separately for their individual impacts to the T&E species and their habitats if the project intends to rely on the provisions of the Program for ESA compliance. The states of Colorado, Nebraska, and Wyoming and the Department of Interior entered into the Program as a basin-wide cooperative approach for conservation of the T&E species and their habitats instead of individually evaluating the effects and needed mitigation of every project. The FWS has determined that the state of Colorado is in compliance with its obligations under the Program, and as participants in SPWRAP the water providers and Chatfield Reallocation also are part of the Program.	Central Platte
285, 446, 526, 529, 605	The city of Brighton [and now others] is still included in this DEIS as a Chatfield Water Provider Group. Everyone in the proponent group knows that Brighton is no longer interested in participating in this reallocation, including the Army Corps of Engineers. If upstream proponents are utilizing water from Brighton, a downstream user, it will not enter the downstream section of the river. The EIS should include an updated list of water providers and information about water rights that would be exercised for water to be stored in Chatfield. If these changes affect inflows, then elevation durations, average yields, and parameters that depend on them should be recalculated and included in the EIS.	The EIS has been revised to reflect the current list of Chatfield Water Providers. The document reflects current information based on written letters, documents and executed contracts. The providers have a process for purchasing outstanding shares when a party has withdrawn from the project. Credence can only be given to information that is substantiated in writing. The providers are committed to working together and are aware that ultimately, if the agency makes substantial changes in the proposed action that are relevant to environmental concerns or there are substantial new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts conditions change, a supplemental FR/EIS may be necessary.	Change

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460	4.9.3, p. 4-93 - This section refers to the “current understanding of how water providers would access and store water in Chatfield.” There should be a mechanism for future re-evaluation of all project impacts should a significant change in access to and storage of water in Chatfield Reservoir occur, either by the existing water providers or, potentially, future new water providers.	Monitoring will be required to ensure impacts that do occur are mitigated and unanticipated impacts are identified and resolved (see the Adaptive Management Plan).	Change
529	Provider water rights must be listed up front in the EIS. It is important in being able to fully evaluate project impacts. In addition, there is speculation that the water providers are really trying to get storage in Chatfield so that they may transfer previously-undisclosed water rights or new water rights to Chatfield to improve yield. This speculation may partially be explained by the fact that in Chapter 2, it states that for alternatives “To advance, concepts would not require the acquisition of water rights through new filings or by purchasing and transferring existing water rights from current water providers in a reasonably foreseeable time frame”(p. 2-6). However a description of the project in Appendix V (p. 1) says reallocated space would be filled “using existing or new water rights” (our emphasis). Utilization of different water rights could change the ability of reallocated space to fill, and could have significant environmental impacts that are different than those captured in the DEIS. It should also be mentioned that further evaluation (supplemental EIS) would be needed if water rights to be used were changed or different than those currently planned to be stored in the reservoir.	The sentence in Chapter 2 is indicating that in the screening of alternatives, an alternative may be screened out (i.e., not further considered) if it includes the essential need to acquire someone else's water right in order for the alternative to be viable. Whereas, the sentence in the BA addresses how the entities who are trying to acquire reallocated storage space in Chatfield will make the space usable for themselves by acquiring the needed water rights that allow the water to be stored there. The entities may or may not have the water storage rights now and may acquire additional water rights in the future to store water in Chatfield. Table 3 of Attachment 1 to the BA (i.e., the "PRRIP BA") will be revised to show the water rights that are planned to be used in Chatfield Reservoir. A change in water rights does not in itself require a supplement; however, if water rights changes lead to significant effects not originally identified in the EIS, a supplement would be warranted.	change
529	On p. 15 the CEQ memorandum states that “If a mitigation commitment…fails to mitigate the environmental effects as predicted, the responsible agency should further consider whether it is necessary to prepare supplemental NEPA analysis and documentation.” Has the Corps made provision for these circumstances?	The Corps is committed to ensuring mitigation is established and maintained. The Corps is aware of the requirements to initiate supplemental analysis should some aspect of the project significantly change from what was originally planned.	change
570	Water Providers have in the past chosen not to pursue their allocated amounts and their allocation has been assumed by other entities (Draft FR/EIS Section 1.5, pages 1-10 to I-II). It is foreseeable that other providers may choose to reassign their allocations in the future. The Final FR/EIS should recognize that	Under the Water Storage Agreement, CDNR will have the right to use the 20,600 AF of storage between elevations 5432 and 5444 to store and withdraw water for the purpose of water supply. In coordination and consultation with water providers through sub-agreements, CDNR will operate this storage within the parameters	change

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	participants have flexibility to readjust their specific storage allocations in Chatfield pursuant to the mechanism in the agreements, provided such reassignment of interests does not result in significantly different impacts from those evaluated in the EIS.	described in the approved Feasibility Report/EIS. Any significant departure from the evaluations captured in the EIS would be subject to a new supplemental NEPA analysis.	
628	Will the water users be able to lease their storage space to other water users or administratively exchange their water with other water users (such as Denver Water) and, if so, how might that temporary change impact flows below Chatfield Reservoir?	Under the Water Storage Agreement, CDNR will have the right to use the 20,600 AF of storage between elevations 5432 and 5444 to store and withdraw water for the purpose of water supply. In coordination and consultation with water providers through sub-agreements, CDNR will operate this storage within the parameters described in the approved Feasibility Report/EIS. Any significant departure from the evaluations captured in the EIS would be subject to a new supplemental NEPA analysis.	change
628	If a particular Chatfield Water Provider does not have water to fill their portion of the reallocated space, may they lease that space to another entity with more senior water rights?	Under the Water Storage Agreement, CDNR will have the right to use the 20,600 AF of storage between elevations 5432 and 5444 to store and withdraw water for the purpose of water supply. In coordination and consultation with water providers through sub-agreements, CDNR will operate this storage within the parameters described in the approved Feasibility Report/EIS. Any significant departure from the evaluations captured in the EIS would be subject to a new supplemental NEPA analysis.	change
285, 455	According to the U.S. Geologic Survey, further changes in the climate are being predicted as reduced runoff and hence water availability. The University of Wyoming has predicted that for its state, every degree rise in temperature will reduce the amount of rain by 3 inches. Over 30 years, the temperature is predicted to rise 3 degrees. Therefore, relying on POR is an overestimate.	If the future climate is wetter, there will less pool fluctuations and possibly a higher yield than has been evaluated. If the future climate is drier, there will be more of a demand for water and the yield could be reduced.	Climate
529, 570, 880	Climate change receives only a cursory mention. There is universal agreement among credible scientists that climate change is real and that drier conditions can be expected across western North America, with increasing temperatures resulting in reduced water supplies and increased evaporation. During the Chatfield “cooperators” meetings, representatives from both the Audubon Society and the Sierra Club stated that climate change should be addressed in the NEPA documents. During those discussions, specific reference was made to the article “Stationarity is Dead – Whither Water	The DEIS does acknowledge climate change in multiple locations, particularly in Chapter 4. Furthermore, the DEIS discloses the limitations of stationarity-based modeling described in the referenced two-page opinion paper (Milly et al., 2008). Chapter 4, Section 4.3 states, “In summary, this study used historical flow data over the POR [period of record], which will reflect any impacts to the river flows over time, including changes in available water rights, water supply needs, timing of runoff, or additional reservoirs constructed upstream… Although the historical data represent a	Climate

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	Management?" (Science, Vol. 319, 1 February 2008). This article cautioned about relying on historic data to predict future runoff.We suggest inclusion of language summarizing recent climate change studies. We have added relevant citations below for those studies. We suggest the following be added to the discussion on climate change in Section 4.19 (Draft FR/EIS, page 4-142): A large volume of scientific research and studies agree that global temperatures are increasing and that precipitation trends will change in the future. The warming trend is expected to accelerate in coming decades. In the western United States, longer periods of drought are expected and there is a call to re-evaluate current infrastructure and standard infrastructure planning and design practices to consider conditions outside of the historical hydrology. Climate change information specific to Colorado indicates that snowpack melting and spring runoff will occur earlier in the year, temperatures will increase by approximately 4 degrees Fahrenheit by 2050, with summers warming more than winters. There is not agreement on the potential changes to precipitation in Colorado, though modeling of the Colorado River Basin indicates overall lower runoff on the West Slope (Water Research Foundation, 2012). It is recognized that the hydrologic modeling predictions in the EIS based on the historic period of record may be affected as a result of climate change. Impact and mitigation monitoring and specified adaptive management measures will help adjust mitigation measures as may be warranted due to these uncertainties. Additional References: A. Water Research Foundation, Joint Front Range Climate Change Vulnerability Study. Produced in collaboration with Denver Water, Colorado Springs Utilities, Boulder Department of Public Works, City of Aurora Utilities, Fort Collins Utilities, and the Northern Colorado Water Conservancy District (2012).	wide range of possible future flow conditions, it is possible that future flows may include periods of wet or dry conditions that are outside the range observed in the historical record, particularly as a result of climate change and increased hydrologic variability" (page 4-21). DEIS Appendices H and I include more detailed discussion of historic flows and adjustments. The DEIS incorporates the best available local climate research (Water Research Foundation, 2012). Milly et al. (2008) describe the need to develop new hydrologic tools including nonstationary models to optimize water systems. "The challenge is daunting. Patterns of change are complex; uncertainties are large; and the knowledge base changes rapidly" (page 573). The paper (Milly et al., 2008) issues a call to develop such approaches, which are unavailable at this time and therefore were not incorporated into the DEIS. The DEIS does reference the Joint Front Range Climate Change Vulnerability Study (JFRCCVS). As stated in Chapter 4 (pages 4-21 and 4-22), the JFRCCVS was still in progress during the development of the DEIS. This section has been revised to include results from the recently released final report. The JFRCCVS selected two locations on the South Platte River, including one near Chatfield Reservoir, to quantitatively evaluate the potential changes to streamflows under different climate change scenarios modeled for the Front Range. Those results have been added to Chapter 4. Additional modeling is not necessary to forecast climate change impacts on the South Platte River near Chatfield Reservoir.Changes will be made to Table 4-1, Summary of Adaptive Management Measures to Address Potential Impacts and Uncertainty, first row, third column on page 4-3 as follows: Climate change may result in more floods and more or longer periods of drought, which cannot be accurately predicted now. Annual average streamflow volumes in the South Platte could decrease with climate change (Water Research Foundation, 2012). The Corps' model uses inflows during the 1942–2000 POR, which tend to be greater on average than predicted for future conditions for all alternatives. This results in a greater probability of adequate mitigation for all types of inundation-related environmental impacts.	

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	http://cwcb.state.co.us/environmentlclimatechange/ Pages/ JointFrontRangeClimateChange VulnerabilityStudy.aspx; B. Brekke, L.D., Addressing Climate Change in Long-Term Resources Planning and Management User Needs for Improving Tools and Information. U.S. Army Corps of Engineers and Bureau of Reclamation. Technical Report CWTS10-02 (2011); C. U.S. Army Corps of Engineers, Tri-Lakes Sedimentation Studies Area-Capacity Report; M.R.B. Sediment Memo 23a (Revised July 2011); D. Western Resource Advocates, et al., Filling the Gap (2011). I believe the President has dictated to all Federal agencies that they have to treat climate change in any Federal plan. You guys don't do it. On 122, you throw up your hands and say it's difficult. But it's being done. The Bureau of Reclamation years ago did a study on the Colorado River; a modeling study, to be sure. But they found, given the increase in temperature, that the Colorado River would experience 11 percent decrease in flow. It is very important that you treat this and you treat it seriously. In addition to this, you need to look at any decrease in precipitation.	Changes will be made to Section 4.3, Hydrology, last paragraph on page 4-21 and first paragraph on page 4-22 as follows: Although the historical data represent a wide range of possible future flow conditions, it is possible that future flows may include periods of wet or dry conditions that are outside the range observed in the historical record, particularly as a result of climate change and increased hydrologic variability. As described in greater detail in Section 4.19, with climate change the southwestern United States is likely to experience precipitation and evapotranspiration changes that result in less runoff and water availability (Brekke et al., 2009; Ray et al., 2008). Additional research is needed to quantify the uncertainty in current estimates to better understand the risks of current and future water resource management decisions. The uncertainties include the actual uncertainty in the climate response as well as the uncertainty caused by differences in methodological approaches and model biases. In an attempt to address this need, a group of Front Range water agencies collaborated to complete the Joint Front Range Climate Change Vulnerability Study (Water Research Foundation, 2012) available at http://cwcb.state.co.us/Home/ClimateChange/JointFRCCVulnerabilityStudy/). This study examines the effects of climate change scenarios on several watersheds, including the South Platte. The central objective was to assess potential changes in the timing and volume of hydrologic runoff for the years 2040 and 2070 as compared with 1950-1999. Two hydrologic models were calibrated and implemented, and modeled streamflows were compared to historic streamflows to estimate the sensitivity of water supplies to climate change. The study considered a pool of 112 general circulation models (GCMs), which show broad variability in projected future temperature and precipitation for the North-Central region of Colorado. Five GCM projections for each future period (2040 and 2070) were selected and used for hydrologic simulations. These projections were selected to represent the general range in projections and are described broadly as “Warm & Wet,” “Hot & Wet,” “Median,” “Warm & Dry,” and “Hot & Dry.” Though all 10 projections showed warming, the average annual temperature changes ranged from just over 1^0 to nearly 6^0 Fahrenheit (F) for the	

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		2040 time period and from about 2^0 to nearly 10^0 F for the 2070 time period. The average annual percent change in precipitation ranged from -15% to +17% for the 2040 time period and from -18% to +28% for the 2070 time period. Likewise, hydrologic responses simulated from the selected GCM projections vary significantly. For example, average annual change in streamflow volume for the South Platte below Henderson ranges from +33% (under the Warm & Wet scenario) to -35% (under the Hot & Dry scenario) for the 2040 period. Analysis of the change in timing for the 10 scenarios indicates that the annual runoff could arrive 1 to 14 days earlier in the 2040 simulations and 7 to 17 days earlier in the 2070 simulations. These ranges result from the differing average annual changes in temperature and precipitation, from the difference in the monthly distribution of those changes in each projection, and from differences in the spatial distribution of the changes. Although the results indicate both increases and decreases in annual streamflow volume, more of the 10 selected climate projections resulted in decreases rather than increases. When decreased annual streamflow volume is indicated for a given projection, it is a result of the computed increase in evapotranspiration due to increased temperatures, coupled with either a decrease in precipitation or else a small increase in precipitation that is insufficient to offset the increased temperature effect. (The GCMs do not model changes in wind speed, solar radiation, relative humidity, or other factors beyond temperature that also affect evapotranspiration rates.) Drier basins, including portions of the South Platte, experience larger percent reductions in streamflows due to warmer conditions, while wetter basins, including the upper areas of Colorado, show smaller percent reductions. Although the study results indicate broad variability and uncertainty about future streamflows in the South Platte, they suggest that reduced future streamflow volumes are possible above and below Chatfield Reservoir in the future as a result of climate change. Changes will be made to Section 4.3.5, Reduction of Potential Impacts, fourth paragraph on page 4-37 as follows: Climate change will result in greater variability in climate. There may be more floods and more or longer periods of drought, which cannot be accurately	

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		predicted at this time (Ray et al., 2008). Annual average streamflow volumes in the South Platte could decrease with climate change (Water Research Foundation, 2012). The Corps' model uses inflows during the 1942–2000 POR, which tend to be greater on average than predicted for future conditions for all alternatives. This results in a greater probability of adequate mitigation for all types of inundation-related environmental impacts. Reduced streamflow volumes in the South Platte River from climate change also could result in fewer years when usable water storage would occur in Chatfield Reservoir's conservation pool, but the same lack of water storage would occur under Alternatives 1, 2 (for gravel pit storage), 3 and 4, or other water supply projects involving surface water sources. Surface water projects satisfy one component of the project's purpose and need (described in Chapter 1, Section 1.6), which is to reduce dependence on nonrenewable NTGW use in the Front Range. Changes will be made to Section 4.9.3, Alternative 3—20,600 Acre-Foot Reallocation, fourth paragraph on page 4-90 as follows: Using the POR flow and pool elevation data, these parameters and actions were analyzed and estimated. The modeling using POR data assumes that conditions of the past can predict conditions in the future. Modeling does not take into account climate change, which may result in more floods and more or longer periods of drought that cannot be accurately predicted at this time (Ray et al., 2008). Annual average streamflow volumes in the South Platte could decrease with climate change (Water Research Foundation, 2012). In addition, the inflows during the entire POR tend to be greater on average than those expected during future conditions for all alternatives. This results in a greater probability of adequate mitigation for all types of inundation-related environmental impacts. The analyses in this section were conducted to understand the potential adverse impacts on TES species. Changes will be made to Section 4.19, Cumulative Impacts, fourth and fifth paragraphs on page 4-142, continuing onto page 4-143 as follows: In addition, the best available scientific evidence based on observations from long-term monitoring networks indicates that climate change is occurring and will continue to occur (Brekke et al.,	

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		2009). Climate change affects water availability, water demand, water quality, stormwater and wastewater infrastructure, flood infrastructure, wildland fires, and ecosystem functioning. These factors affect the water resources projects operated by the Corps, many of which were designed and constructed before climate change was recognized as a potential influence (USACE, 2010). Potential climate change impacts affecting water availability include changes in precipitation amount, intensity, timing, and form (rain or snow); changes in snowmelt timing; and changes to evapotranspiration (Brekke et al., 2009). Water supplies in the southwestern United States are projected to become increasingly scarce, calling for trade-offs among competing uses (Karl et al., 2009). Four overlapping areas with unresolved issues are climate models, research specific to Colorado, drought, and reconciling hydrologic projections (Ray et al., 2008). The results from several general circulation models agree that the southwestern United States is likely to experience precipitation and evapotranspiration changes that result in less runoff and water availability (Brekke et al., 2009). The consistent projections for a substantial temperature increase across Colorado have important implications for water management (Ray et al., 2008). Increases in temperature imply more evaporation and evapotranspiration leading to higher water demands for agriculture and outdoor watering. Temperature-related changes in the seasonality of streamflows (e.g., earlier runoff) may complicate prior appropriation systems and interstate compact regimes; and modify the interplay among forests, hydrology, wildfires, and pests (e.g., pine beetles) (Ray et al., 2008). The wide range of Colorado precipitation projections makes it difficult to assess likely changes in annual mean precipitation by mid-21st century. However, a synthesis of findings (Ray et al., 2008) suggests a reduction in total water supply by then. Limitations imposed on water supply by projected temperature increases are likely to be made worse by reductions in rain- and snow-fall in spring months when precipitation is most needed to fill reservoirs to meet summer demand (Karl et al., 2009). Furthermore, there is potential for increased drought severity in the region due to higher temperatures alone. The Front Range Climate Change Vulnerability	

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		Study confirmed these forecasts, indicating that annual average streamflow volumes in the South Platte could decrease with climate change (Water Research Foundation, 2012). Changes will be made to Section 4.19.3, Hydrology, fourth complete paragraph on page 4-153 as follows: Climate change may result in less runoff and water availability in the Southwest (Brekke et al., 2009). Projected increases in temperature over Colorado could translate into increased water demands and earlier snowpack runoff. Total water supplies in Colorado may be reduced by mid-century (Ray et al., 2008). The Front Range Climate Change Vulnerability Study confirmed these forecasts, indicating that annual average streamflow volumes in the South Platte could decrease with climate change (Water Research Foundation, 2012).	
125, 440	Will the lake be open during construction of the project? Who will pay for loss of use and jobs of current park employees while the project is underway? What does the Corps propose for alternative recreation during the project implementation? What does the Corps propose for alternative recreation during the project implementation?	Yes, the park will remain open during construction. Current Chatfield State Park employees are expected to remain employed, and concessionaire employees are paid from concession income; the Water Providers have agreed to reimburse the park and concessionaires for any documented reductions in income every year, so it is not expected that any employees will necessarily be without paychecks during or after construction of recreation modifications. Marina construction is proposed during non-summer months; all other recreation facilities that will be modified are duplicated at other Chatfield sites, and at least one site for each type of recreation activity will remain open while other similar sites are being modified. Many users of the large gravel pond can use other gravel ponds while the protective berm and other modifications are made at the large gravel pond. See Appendix U, Exhibit III-1, Section III, p. 5, for schedule of constructing modifications for each recreational site.	Construction Timing
439, 674, 676	It is stated that the construction would take 3-5 years. What happens to all the wildlife in this period of time especially with the noise and the destruction of their habitat for five years? What plans are in place for this?	Some wildlife will likely be temporarily displaced during construction associated with modification of the recreation facilities. Some areas will not be able to be used by wildlife during construction and wildlife may be affected by noise, human presence and construction machinery. These impacts will be temporary. Other construction has occurred within the park over its history, with wildlife returning to use the areas post-construction. As discussed in Chapter 4 of the draft	Construction Timing

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		FR/EIS, clearances will be done for nesting birds prior to the removal of woody vegetation to minimize impacts to nesting migratory birds and to the degree practical, trees and shrubs will be removed in the non-nesting season.	
159,166, 183, 198, 207, 214, 226, 227, 285, 286, 319, 334, 414,440, 443, 454, 456, 491, 502, 507, 529, 554, 561, 576, 578, 608, 622, 660, 789	The Corps did not give sufficient consideration to the potentially significant impacts to aquatic and riparian habitat that will take place immediately below (downstream flows from) the reservoir in South Platte Park due to altered Chatfield operations and reduced "base" flows. Will the South Platte River have the original amount of water agreed upon when the dam was built in order to maintain a healthy river through Littleton? I see no evidence of mitigation for reduced stream flow in the report for the area directly below the dam. Has CDOW been consulted with on this aspect of the project? There are plans by downstream communities to complete stream restoration. How will this project influence those plans? We are disappointed that those plans (reference Downstream Flow Enhancement Appendix) have been abandoned, and urge the Corps of Engineers to reconsider the possibility of using Chatfield storage space to improve flow conditions in the South Platte River. We can find no commitment to address downstream flows, and we are disappointed that there is no requirement in the DEIS for the project participants to improve downstream flows. You should allow water users to have water stored in Chatfield only if they divert water downstream of South Platte Park.	There would be an overall slight decrease in total flow released from Chatfield due to additional diversions from the reservoir for the upstream water users. During some periods Chatfield releases would increase due to releases from storage for downstream water users. This would typically occur during late summer when flows are low and demands are high. Refer to Appendix H for detailed evaluation of impacts on flows below Chatfield and at the Denver and Henderson gauges. From an ecological standpoint, the differences were considered to be insignificant. An adaptive management plan has been developed and will be included in the FEIS. The plan provides a more comprehensive discussion regarding the framework for addressing the uncertainties associated with impact estimates and proposed mitigation for the resources of concern, and also includes resource-specific monitoring and management actions, including downstream flows and aquatic habitat effects. The EIS analysis anticipates that downstream impacts would be minimal. Over and above the Federally Recommended Plan, the water providers, as part of the state management plan, propose to fund stream habitat improvements on up to 0.7 miles of the mainstem of the South Platte River above Chatfield, and the water providers have agreed to pursue stream habitat improvement on up to 0.5 miles of the mainstem of the South Platte River downstream of Chatfield Reservoir. The specific sites and project designs for these measures will be selected in coordination with CDOW. These measures are above and beyond the federally recommended plan. The adaptive management plan includes discussion of downstream flows. Flow changes downstream will be minimal and are unlikely to impact water quality; however, the adaptive management plan addresses uncertainties in downstream flows.	Downstream Flow

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	In the CMP, we suggest you consider mitigation provisions to address the potential aquatic life impacts of flow changes to the South Platte River downstream of Chatfield Reservoir. The Draft Ecosystem Restoration Evaluation Report (Great Western Institute et al 2007; Appendix D) evaluated opportunities to protect and enhance fishery habitat through management of future water releases. The study found that alternative release patterns from the reallocated storage to address base flow conditions during the winter months (a critical aquatic stressor) can dramatically improve conditions. There is concern by downstream communities that the potential impacts to aquatic and riparian habitat have not been adequately addressed. This is especially true for the stream segment immediately downstream of Chatfield prior to tributary influence. The Draft FR/EIS recognizes that the critical stressors for aquatic biota downstream of the reservoir are: (1) "stress during late summer months from increased water temperatures and decreased flow" and (2) "base flow conditions during the winter months." (See Draft FR/EIS at 4-51 and 4-52). I.e., both situations caused by low flow. Use of average monthly flow data may be inappropriate (depicted in Figure 4-12 in the Draft FR/EIS). Use of Denver gauge data may also be inappropriate (tributaries between Chatfield and Denver obscure any meaningful connection). The figure depicts both monthly average flows during the study period and the expected change to that monthly flow if the Tentatively Selected Plan (Alternative 3) is implemented. The following conclusions are drawn on downstream impacts: 1) that the up to 5% reduction in average monthly flows that will take place 9 months of the year (and nearly 10% reduction in flows in February) constitute a "minimal" change with an "insignificant" impact on aquatic biota; 2) less than 5% increase that will take place in the single month of July "would have a positive effect on aquatic biota." Perhaps based upon the inherent disconnect in using average monthly data to develop conclusions concerning low flow impacts, the Corps arrives at inconsistent conclusions in the Draft FR/EIS concerning winter base flows (see page 4-52). The Corps' own modeling, as well as that of the Great Western Institute, indicate that under Alternative 3 we can expect		

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	additional days when Chatfield flows are reduced below 10 cfs (Appendix D and Appendix CC). This reduction in flow will, according to the statement above, have minimal or no impact to aquatic biota while at the same time proper management of releases to achieve a minimum of 10 cfs could "greatly improve" fish habitat. ---These conclusions seem potentially incongruous in that positive benefits are found from such small increases, and that the negative impacts are "insignificant." Also, that any definitive conclusions can be derived at all from average monthly flow data is problematic. The correlation between this average monthly flow data and potential harm to aquatic life in the park becomes even more tenuous when it is considered that this data comes from measurements taken at the Denver gauge. Even if they are short in duration, any such periods of substantial low flow can be devastating to a fishery.		
443, 789	How will downstream users get more water from Chatfield if there are decreased downstream flows?	Water would be released from storage to meet the demands of downstream users.	Downstream Flow
183, 443, 454, 529	Why was the Denver gauge chosen for stream flow data when the Littleton gauge would be a more appropriate indicator of instream flow downstream from Chatfield?	Other gauges were also analyzed in addition to the Denver gauge. Refer to Appendix H.	Downstream Flow
183, 285, 334, 502, 554, 674	-The FR/DEIS suggests that there will be benefits of increased instream water flow during months of typical low flow due to the release of captured water during times of high spring runoff. However, graphs in the report project that the flows will actually have an average decrease due to storage and increased calls for water from upstream users. In addition, the DEIS states that any increased flows in the South Platte River downstream of Chatfield Reservoir from the Chatfield Reallocation are insignificant. - Section 4.5 - The text says that the "River ... would have minimal changes during base flow conditions, and a small increase in flow during the late summer months" but Figure 4-12 and other data contradict this conclusion. - The POR depicts the amount of water from the past years. There is recognition that this presents an inaccurate picture of a greater amount of water available in the future. This misleading amount of water influences the alternative analysis, the need of this project, as	There would be an overall slight decrease in total flow released from Chatfield due to additional diversions from the reservoir for the upstream water users. During some periods Chatfield releases would increase due to releases from storage for downstream water users. This would typically occur during late summer when flows are low and demands are high. Refer to Appendix H for detailed evaluation of impacts on flows below Chatfield and at the Denver and Henderson gauges. From an ecological standpoint, the differences were considered to be insignificant. Figure 4-12 was revised to show the flows with and without the project.	Downstream Flow

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	well as how successful the mitigation will be. This is deceptive.		
460	The Draft FR/EIS identifies potential downstream impacts to the aquatic environment in the South Platte River that may result from the preferred alternative. These impacts may stem from predicted alteration in the timing of flows, reduction in flows (particularly in the winter months), and an increased number of zero flow days. Reduced flows may in turn adversely impact water quality. The Draft FR/EIS describes conceptual mitigation approaches, mostly based on changing water retention times in Chatfield Reservoir and the timing of water releases downstream. While there is ample text describing potential actions to address these concerns, there appears no specific commitment to any such efforts. We believe that such commitments are needed and that details of how coordination efforts by water users would offset any downstream impacts must be established.	An adaptive Management Plan was prepared for the final FR/EIS (Appendix GG) and it discusses how potential effects to downstream flows and aquatic habitat will be addressed. Additionally, the Chatfield Water Providers and the State are in discussions regarding how to address potential downstream effects over and above the Federally Recommended Plan.	Downstream Flow
460, 554, 578	4.5.3, p. 4-52 - The first paragraph presents an apparent contradiction. It states both that base flow in winter is a critical aquatic stressor in the South Platte River and that management of reservoir outflow to maintain 10 cfs could greatly improve habitat for fish, but also that a predicted decrease in winter flows downstream from Chatfield Reservoir under Alternative 3 would result in minimal or no impact to aquatic biota. See also 5.3.4, p. 5-12 that lists “Depletion of winter base flows below Chatfield Reservoir under Alternatives 3 and 4” under, “The major potential adverse impacts that have been identified…” Projected average monthly percent decrease in river flow under Alternative 3 is greatest during winter months (see Figure 4-12). Daily decreases in flow may be even more severe (see 5.5.1.6., p. 5-20) and zero flow days are predicted to rise. The conclusion that decreases in winter flows downstream of the reservoir would result in minimal or no impact seems unwarranted. Even if they are short in duration, any such periods of substantial low flow can be devastating to a fishery.	With the reallocation there would be an overall slight decrease in total flow released from Chatfield due to additional diversions from the reservoir for the upsteam water users. During some periods Chatfield releases would increase due to releases from storage for downstream water users. This would typically occur during late summer when flows are low and demands are high. Appendix H contains more detailed impacts on flows based and daily flows below Chatfield and at the Denver and Henderson gauges.	Downstream Flow
460	4.5.5, p. 4-56 - Citation of the USFWS 2006 Planning Aid Letter as a source of a general comment regarding potential changes to future flow patterns in the South Platte River (that they will likely occur) appears misplaced.	We agree, the reference to the Planning Aid Letter (USFWS, 2006) will be deleted from this paragraph.	Downstream Flow

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529	Text and figures differ regarding possible impacts on South Platte River flows downstream and water level fluctuation. 1) Figure 4-12 shows that water flows will be slightly lower 9 months out of 12, the same for 2 months out of 12, and slightly elevated 1 month out of twelve (July). During the discussions of possible river restoration flows in 2004-06, increased flows in the river, especially in winter, were touted as a benefit of the project. It is quite clear from the DEIS that these benefits will not occur, and the text touting such benefits in Chapter 4 should be deleted. Figures for water fluctuations resulting from Alt. 3 vary widely: 28.2 feet (4-74) on rare occasions during the growing season; Seasonal fluctuations of up to 21 feet (Table 2-9 and p. 4-91); During the growing season, average peak fluctuations of 3 feet or 2-3 feet (4-81); On rare occasions 20 feet (4-81); Up to 7.1 feet for alt. 3 (4-74) or 7.3 feet (4-114). Though the exact figures differ, the DEIS also includes statements like “the exact new condition for each alternative is unknown due to the high fluctuation of the water levels associated with certain alternatives” (p. 4-54). The reasons for, and timing of, water level fluctuations are not included in discussions of impacts. The fluctuations are just referred to in the context of whatever topic happens to be at hand.	Appendix H and Section 4.3 of the FR/EIS ("Hydrology") contain information on the inputs and methods used to model Chatfield Reservoir under the alternatives. Pool elevations fluctuate from year to year and within the year due to variations in the inflows to the reservoir, losses and gains within the reservoir (i.e., evaporation and precipitation), and downstream releases. As indicated in Section 4.3, under any of the alternatives, when flows enter the reservoir, the first commitment would be to meet senior water rights, and once those needs are met, any excess flow would be retained in the available storage of the reservior (below the maximum elevation of the pool containing conservation storage). After the water levels reach the base elevation of the exclusive flood control pool, any excess flows would be released downstream. Inflows to Chatfield Reservoir vary daily (every day of the modeled period of record [POR]) due to variations in upstream precipitation and runoff, and releases from upstream reservoirs on the South Platte River. Annual average daily inflow varies considerably over the POR, as shown in Table A-H-5 in Appendix H (56.5 cfs in 1954 to 784.4 cfs in 1942). Figure 4-3 shows the considerable variation in inflows from month to month (mean monthly inflows). Pool elevations and fluctuations for each alternative are described throughout the FR/EIS, focusing on those periods of the year that are important to each resource (e.g., the growing season for plants).	Downstream Flow
541	It is a fact that if water is stored during the times when flows are highest, the subsequent releases of any of that stored water must, by definition, supplement smaller flows at a different time of year. The "instrearn" group has been very interested in developing specific plans for coordinating such flows to enhance downstream fisheries, riparian habitat, and recreational uses.	Comment noted.	Downstream Flow
576	The DEIS does not analyze how decreased outflows from Chatfield Reservoir into the South Platte River from the project may affect existing water quality impairments, TMDL loads, or permitted dischargers. Flow reduction may decrease the South Platte’s assimilative capacity. The EPA is concerned that an increase in concentrations could exacerbate existing impairments or necessitate a change to the loading requirements specified in TMDLs.	A reduction in South Platte River flows during “historic” low flow periods would likely, over time, result in reduced “design flows” conditions for determining water quality-based permit limits and assimilative capacity for TMDL implementation. Maintaining flows during “historic” low flow periods would avoid this problem. No affects to water quality downstream are expected though, because flow conditions would not be significantly different than now.	Downstream Flow

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		The concern is valid. Limits for permitted dischargers and TMDLs are based on the assimilative capacity of the river and based on the South Platte River's design flows (i.e. low-flow conditions). If low-flow conditions in the South Platte River downstream of Chatfield Reservoir were to decrease because of storage reallocation, permit limits and TMDLs would likely have to be recalculated and "tightened" up. Maintaining current design flows during low-flow periods would address this concern.	
628	We are concerned that the hydrologic modeling does not accurately characterize the changes in streamflow that will occur immediately below the reservoir because the DEIS uses the Denver and Henderson gauges to gather historical flow data, even though these gauges are located a significant distance below Chatfield Reservoir. These gauges are also located below two significant South Platte tributaries (Bear Creek and Cherry Creek), which add water to the river.	Other gauges were also analyzed in addition to the Denver gauge, including actual releases from Chatfield. Refer to Appendix H.	Downstream Flow
628	The hydrologic modeling seems to rely heavily on a synthetically reproduced hydrology. It appears that actual historic releases of stored inflow data from Chatfield Reservoir are not assessed and that the releases stored water versus non-flood inflows passing through the reservoir are not factored into the analysis, suggesting decreases in flows may be greater than predicted. The DEIS evaluates changes in annual and mean monthly flows to analyze impacts to downstream flows. We feel a more accurate assessment of impacts could be gained by evaluating changes on a daily and weekly basis. We recommend utilizing daily or weekly time-step information from the Chatfield stream gauge, which is located immediately downstream of the reservoir. We are concerned that future operations that drop streamflows below current levels could impact the Chatfield State Fish Unit and downstream aquatic resources.	Appendix H contains more detailed impacts on flows based and daily flows below Chatfield and at the Denver and Henderson gages.	Downstream Flow
628	The DEIS states that impacts are not anticipated to the Chatfield State Fish Unit located downstream of the reservoir. How is this claim supported? We think this can be accomplished via daily and weekly flow changes at the Chatfield stream gauge.	Changes to daily releases over the period 1942-2000 were evaluated. Refer to Appendix H.	Downstream Flow
789	How will less water affect the health of the river and the habitat and	Downstream flows are not anticipated to be impacted to a significant	Downstream

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	wildlife that depend on the river? What will be the impact on recreation on the river?	degree.	Flow
790	Information on the likely flows from Chatfield Dam downstream through the cities of Metro Denver is not included in the body of the report (although it is included in Appendix H) and seems to be underemphasized as an integral part of the study's analysis. We strongly urge the Corps to (1) revisit flow information in the DEIS, (2) provide and document additional information about anticipated flows and any expected changes to the current annual hydrograph in the South Platte going through Arapahoe County, (3) provide for more effective measurement of flows through Arapahoe County rather than depending on Denver and Chatfield gauges and (4) provide such flow information in the body of the Final EIS rather than in the Appendix to ensure that the importance of and potential impacts to flows are clear to all who read the Final EIS.	Daily flows for the period of record 1942-2000 were simulated for existing and with project conditions at Chatfield outlet, Denver gage and Henderson gage. Results of this analysis are contained in Appendix H. With the reallocation, there would be an overall slight decrease in total flow released from Chatfield due to additional diversions from the reservoir for the upstream water users. During some periods, Chatfield releases would increase due to releases from storage for downstream water users. This would typically occur during late summer when flows are low and demands are high. Figure 4-12 in the main report was revised to show the flows with and without the project below Chatfield.	Downstream Flow
370, 438, 655, 660, 789	The Corps of Engineers' plan fails to consider many factors related to property values in Littleton, tax revenues, tourism etc.	Neither the construction resulting from a reallocation action nor the temporary change in recreational activity at Chatfield Reservoir are expected to result in a significant adverse impact to property values in Littleton. Impacts, if any, would be minor and of short duration.	Econ
76, 87, 192, 251, 284, 429, 570, 784, 785, 854, 863, 888, 889, 890, 891, 892, 894, 897, 899, 900, 901, 903	Project is **supportive to agricultural** and maintenance/growth of local communities.	Comment noted.	Econ-Ag
211	If Weld County farmers have overdrawn their own groundwater perhaps they need to reconsider whether water-intensive irrigation makes sense in that part of Colorado.	It is downstream ag users that will utilize water from Chatfield as augmentation water in order to allow utilization of South Platte alluvial ground water for irrigation.	Econ-Ag
77, 429, 720	The future of agriculture in Colorado, particularly along the South Platte River, is largely dependent upon being able to utilize water in the South Platte Aquifer. Water that can be provided by the reallocated storage at Chatfield is important to providing for the replacement water (augmentation water) for out-of-priority depletions. This will help to avoid curtailment of downstream irrigation.	Part of the firm annual yield provided by reallocation of storage at Chatfield Reservoir will be utilized to augment South Platte alluvial ground water used for irrigation.	Econ-Ag

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285, 509	Three of the four alternatives are within 20% cost of one another – and with the uncertainties associated with two of these alternatives (e.g. contingency percentages for construction), there is no statistical difference between these costs. All the presented economic figures need to be reevaluated under the pretense that they are intended to mislead.	Cost estimates were reviewed by the Corps' National Cost Engineering Center of Expertise and found to be adequate for purposes of this analysis.	Econ-Benefits
411	From a national benefit-cost viewpoint, the Draft FR/EIS contains inconsistencies and environmental-economic cost underestimates that appear to invalidate any assertion that the project is economically or environmentally justified.	The economic analysis was done in compliance with Corps guidance provided by ER 1105-2-100. The costs of environmental mitigation measures required to offset adverse impacts were included in the NED cost.	Econ-benefits
411	p. ES 6 - All alternatives assume that 8,539 acre-feet must be provided. Further, while “water providers…are opposed to long-term use of NTGW, …., it is assumed that NTGW could provide water to a significant part of upstream water providers…[as part of the least cost alternative!!].	For planning purposes, the Corps must consider the least cost alternative. Although not popular, it is acknowledged that NTGW use could continue without the Chatfield project into the reasonably foreseeable future. As this is the case, it would form the basis of the required "least cost alternative" needed for cost comparison with other alternatives.	Econ-benefits
411	p. ES 6 - The “test of financial feasibility” compares the cost of the chosen alternative with the costs of the other alternatives. Accepted economic practice, including the P&G, does not accept “alternative cost” as a measure of the benefits of the chosen alternative (#3) since there is no guarantee that the specified alternatives would, in fact, be undertaken. Both projects’ costs could exceed correctly measures benefits.	Corps guidance requires a comparison of the cost of the most likely least cost alternative to the cost of the reallocation alternative as a test of financial feasibility (ER 1105-2-100, appendix E, E-57. d. [5]).	Econ-benefits
493	The Corps should revise the analysis to reflect Chatfield Reallocation's true costs and benefits. Chatfield is well designed to help avoid numerous aquatic and non-aquatic environmental impacts region-wide, such as reduced use of non-renewable, greenhouse gas polluting energy, and the fact that Chatfield Reallocation is not a huge concrete and steel construction project.	The Corps has followed its planning guidance (ER 1105-2-100) in developing economic impacts and benefits, and although these items are not directly captured in the economic analysis, we believe the study does capture the critical costs.	Econ-benefits
649, 650, 655, 658, 660, 669, 670, 673, 659, 758, 813, 878	Chatfield is a unique recreational area and valuable biological resource.	The in-kind recreation modifications and compensatory mitigation plan will facilitate recreation activities as similar as possible to those prior to reallocation, and no net loss in ecological functional units over the 50-year period of analysis.	Econ-benefits
509	Alternative 1, the Penley Dam site, is a gross inflation and the more predictable alternative, the use of the Rueter-Hess Reservoir which	This comment has several inaccuracies. If one uses Reuter Hess, there is still have the expense of constructing the dam. The owner	Econ-benefits

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	is at nearly the same distance for pipeline and pumping already has a dam built. Eliminating the estimated $165M cost of a dam from the Penley alternative suddenly puts this viable alternative at a cost under $100M – and $80-$120M less than all other alternatives making it the least cost alternative.	of the dam/reservoir will charge any new user of the facility the proportional costs of constructing the facilities. Also, the Reuter Hess Reservoir is further in distance (for the needed pipelines) than Penley and the pipeline routes would be through more developed (thus more costly) areas. Both facilities lack the key element of Chatfield of being able to capture and store any flows essentially instantaneously. Thus, flows up to several thousand cfs can be captured where pipelines to either Penley or Reuter Hess are likely to be approximately 100 cfs, so obviously they are less efficient in timely capturing available water.	
525, 544	The National Economic Development (NED) Recreation Benefit Analysis is flawed. The FR/EIS was a 15-year study that identified more than 1.6 million visitor days annually and an average recreational season from June through September. Yet only two recreation assessment workshops were held on one day in April 2009 and only 63 people got to assign Unit Day Value points. That is .004% of Chatfield's visitors- not a robust statistic. Not one person assigning Unit Day Value Points represented a user of a hand-launched boat. Kayak, paddle board, wind surfers, canoes, rowing shells, and the like were not invited to participate and were not represented. The three comments under non-motor craft use pertain to aesthetics and wildlife, not the impacts to these users.	The recreationists who assigned Unit Day Value (UDV) points were expert and experienced in conducting their recreational activity or activities at Chatfield State Park and were much more knowledgeable than the average visitor in being able to accurately assess current and future characteristics of their recreational activity, with and without reallocation. This type of input is referred to as "expert elicitation" and was accepted by USACE Headquarters, USACE's Northwestern Division, and an Independent External Peer Review panel of experts for assigning UDV points. Three workshops were conducted; two on April 16, 2009 and one on April 23, 2009. No one at the workshops was identified as belonging to a canoeing/kayaking organization, but six workshop participants engaged in canoeing and/or kayaking in addition to their favorite activity and assigned UDV points for canoeing and kayaking as well as for their other activity. The comments may focus on aesthetics because it contributes much to their recreational enjoyment, as the first commenter on kayaking and canoeing at the reservoir stated in Exhibit D to Appendix T. The comment on canoeing and kayaking at the gravel ponds in Exhibit D focuses on the distance non-motorcraft have to be carried from the parking lot, which may increase with reallocation.	Econ-benefits
525	There are flaws in the Regional Economic Development (RED) and Other Social Effects (OSE) Analyses. It is based on the assumption of somewhat normal water fluctuation, but states "that may not be the case." Like the NED, it is based on a .006% sample of all annual park visitors, but states "a larger survey effort was not possible due to budget and timing constraints." This was a 15-year study, half	Experiences at other reservoirs with large fluctuations due to water supply withdrawals indicate that there is quite a lot of vegetation on the side slopes of the banks. The Regional Economic Development (RED) survey was done by a consulting firm under contract to Colorado State Parks (now Colorado Parks and Wildlife). The Corps did not have input to the survey of visitation losses and use of	Econ-benefits

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	funded by the U.S. Army Corps of Engineers/federal money, and 88 visitors got to contribute to the RED. The RED also states “the water surface is accessed through one of the three boat ramps.” This is not true (or is very unsafe) for hand-launched boats that use the swim beach area to access the no wake portion of the lake. The values for boating and surface water recreation are not inclusive of the hand-launched recreation activities for impacts to the swim beach area.	substitute sites, but the results seemed reasonable, so they were used in the NED recreation benefit analysis. Regarding the small sample size, the workshop attendees who responded to the survey were expert and experienced in conducting their recreational activity or activities at Chatfield State Park and were much more knowledgeable than the average visitor in being able to accurately assess the effects of reallocation on their recreational activity and decide whether these effects were great enough to cause them to recreate at a substitute site rather than at Chatfield State Park. This type of input is referred to as "expert elicitation" and was accepted by USACE Headquarters, USACE's Northwestern Division, and an Independent External Peer Review panel of experts for assigning UDV points. All recreation facilities must be replaced in-kind, so if an area suitable for hand launching watercraft is provided at or near the swim beach, it must be provided as part of the recreation modifications.	
578	Alternative 3 is not the true "least cost" alternative if the true costs of storage at Chatfield are accounted for prior to the 60% cost of storage discount.	The test of feasibility for the reallocation of reservoir storage for M&I water supply is financial feasibility. Basically a finding that the reallocation is the least cost of the several alternatives providing the same quantity and quality of water. Accordingly the actual cost of the storage is considered.	Econ-benefits
103, 414, 577, 605, 609, 864, 880	Costs for the project will be passed on to the consumers, and as a local water user, I do not want to pay for such an expensive project ($184). It appears to be a bad investment.	The cost of added water supply in the greater Denver area is among the highest in the nation. However the very feasibility of the reallocation project is dependent on it being less costly than the least cost alternative. Accordingly the cost of water is projected to be somewhat higher without a reallocation.	Econ-Consumer
249, 819, 820	Don’t want to pay for the project, which is just more tax dollars going toward unending approvals of new subdivisions and added population densities, traffic, and other infrastructural expansions.	Increasing demand for water is the result of the rapid growth of the Denver Metropolitan area economy and population, not the cause of it. Accordingly the cost of growth are not effect of added water supply. Additionally, as shown by the analysis, water will be supplied regardless of the reallocation, although at a somewhat high cost.	Econ-Consumer
103	I believe that perceived need for additional water storage is a ploy to provide water for potential future customers. These districts are businesses and not government. They are in this business to make money.	Comment noted.	Econ-Consumer

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334, 820	In all it appears the profits from this project will be privatized, while the losses are socialized and left to the public to bear.	No significant long term recreational or social effects were identified. The costs of mitigating environmental other significant negative impacts have been included in the feasibility analysis and reallocation has been determined to be feasible.	Econ-Consumer
651	If farmers are to help pay for this project, they need a say in how the water will be used - it's not just the city of Denver's water. Farmers need water to grow food. If they can't grow food, economic impacts will be severe (i.e., car & truck dealers will fail, farm foreclosures, banks closing, no jobs thus no taxes collected, food costs will rise).	To the extent farmers are paying for the reallocation they will have the same rights as others obtaining reallocated storage. Presently downstream Ag users will utilize water from Chatfield as augmentation water in order to allow utilization of South Platte alluvial ground water for irrigation.	Econ-Consumer
411	Table ES-1 - How can it be that alternative 3 which provides 20,600 af of supply storage (thus inundating more recreational facilities and existing ecosystems) has only $10 million in infrastructure costs compared to the other alternatives? This is probably a taxonomic issue since #3 has much higher environmental and recreation mitigation costs.	The $10 million is an estimate of costs needed to supply and deliver water to their customers. The costs for environmental mitigation and recreation modifications total more than $123 Million.	Econ-Cost
211	Present an updated, transparent project cost estimate, taking into account projected loss of park revenue and the Colorado State Park proposal to acquire 587 offsetting acres nearby.	The costs will be updated to FY 2013 in the final Feasibility Report/EIS, and any revisions needed will be done at that time. In regard to lost revenue, Appendix U estimates the magnitude of these losses, and the Chatfield Water Providers have agreed to reimburse Colorado State Parks and Wildlife (CSPW) and the concessionaires for all lost revenue resulting from the reallocation throughout the life of the project. The CSPW Report on Anticipated Fish and Wildlife Impacts referenced in commenter 211's letter was not an official comment and is superseded by the official Colorado Parks and Wildlife comments on the Draft Feasibility Report/DEIS that were provided to the Corps through the Colorado DNR September 6, 2012. The official CSPW comments do not require that an additional 587 offsite acres nearby be acquired, just "mitigated and/or offset." CSPW stated that the offsite mitigation sites acquired for the Compensatory Mitigation Plan "will need to provide for access and similar watchable wildlife opportunities" for the inundated "area upstream of Chatfield Reservoir on Deer Creek, Plum Creek and the South Platte River" and offers their cooperation on all aspects of mitigation. The CSPW comment states, "Chatfield State Park is clearly an environmental and recreational asset... and offers tremendous economic benefits to the state of Colorado. We	Econ-Cost

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		believe that the project can be a model of cooperation addressing multiple interests and we look forward to working closely with the providers and the Corps of Engineers to achieve that success."	
509	The high cost of alternative 1 is due to dam construction – not the pipeline and pumping costs, which were given as the reasons for excluding a number of the other alternatives – yet this is exactly the plan for Penley (Alternative 1) PLUS the cost of the dam. The economic arguments are weak at best.	The costs of construction of the larger-scale water importation and agricultural transfer concepts were qualitatively determined to be substantially higher (i.e. order of magnitude) than the costs to construct Alternative 1 (Penley Reservoir combined with Gravel Pit Storage). These larger-scale concepts were eliminated from further consideration due, in part, to the substantial higher cost of construction. The Penley Reservoir concept was screened forward to form Alternative 1 due, in part, to its reasonable cost of construction.	Econ-Cost
525	Finally, the cost of the proposed mitigation is underestimated as it does not include the cost of stump removal. Costs for clearing and grubbing are included, but not stump removal. If stumps are left on purpose, they are a safety hazard.	Per the Tree Management Plan (Appendix Z) tree stumps would be ground or removed to eliminate potential hazards to boaters. Boater and visitor safety is a key consideration for any tree removal conducted for the reallocation project.	Econ-Cost
570	Table ES-I (Draft FR/EIS, page ES-8) shows an infrastructure cost of $I0 million for Alternative 3. This is attributable to a pump and pipeline system estimated to cost $10 million that Roxborough Water and Sanitation District proposed at one time as its means to get water out of Chatfield Reservoir. The $112 million infrastructure cost for Alternative 4 also includes these proposed facilities. Roxborough subsequently withdrew those proposed facilities from consideration because it devised other water delivery arrangements. This change was communicated to the Corps (figures were revised), but this cost estimate was apparently inadvertently overlooked. The $10 million estimate is inaccurate and should be removed from both Alternatives 3 and 4. Thus, the information in Table ES-I should be revised as follows: A. There are no infrastructure costs for Alternative 3. This also would lower the overall cost of Alternative 3 to $174.4 million; B. The infrastructure costs for Alternative 4 should be reduced from $112 million to $102 million. This would lower the overall cost of Alternative 4 to $193.4 million.	All four alternatives have unassigned water and additional water providers will participate in the future. It was determined that including surrogate costs that alternative user(s) may have to pay, including the $10M, should be in the cost estimates.	Econ-Cost
866	You need to ensure that any mitigation costs are guaranteed, including any staff increases that might be required at Chatfield State Park, to maintain functioning water and trails and properties	All cost associated with the reallocation, including mitigation or staffing cost will be the responsibility of project proponents. These include future operation and maintenance.	econ-cost

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	and buildings, etc.		
869	Are private concerns donating money to the water providers in support of this project or helping with any of the costs? I would hope that the water providers are providing the majority of funds in support of the Chatfield project as well as a more detailed plan of use, rather than just the general term "industrial."	The Colorado Water Conservation Board is the local cost share sponsor for this study which is funded 50% federal and 50% non federal. If approved, the cost of the project is 100% non federal in accordance with the 1958 Water Supply Act. The non federal sponsor is responsible for those costs.	econ-cost
509, 517, 532, 562, 572, 584, 595, 655, 660	Live in close proximity to Chatfield - quality of life benefits experienced by living here will diminish if reallocation is approved.	No significant long term environmental, recreational, socioeconomic effects are anticipated.	Econ-Quality of Life
8, 32, 333, 334, 376, 381, 396, 402, 414, 432, 448, 480, 499, 502, 509, 515, 525, 579, 649, 653, 674, 821, 866, 882	Costs to the park far outweigh benefits of water supply. The Corps needs to broaden its consideration from simply looking at water supply to considering the detrimental impacts of the proposed project on an irreplaceable public use facility. Water supply from Chatfield should be achieved through a reallocation and mitigation strategy that does not negatively impact equally beneficial public resources (wildlife, habitat, recreation, revenues) that currently exist in Chatfield State Park. The report currently contains nothing detailed as to how the benefits of recreation will be replaced, or the **negative economic impact that the loss of recreation will have** on the economy. This study recommends spending $184,400,000 so that 15 water suppliers with junior water rights MAY contain an average of 8,500 acre feet per year. That is 8.5% of THEIR projected annual 100,000 acre feet shortfall, not the Denver Metro areas' projected annual shortfall. That is not a huge benefit to the Denver Metro area's long-term needs, yet the plan permanently impacts Chatfield's visitors, plant and animal life. Are there plans for all of these losses to recreation and revenue? Total projected dollars in lost revenue to the park should be added to the water users' cost, and there should be a legally-binding agreement to make those annual payments in a timely manner.	Changes in both recreation activity and quality, the cost of modifying recreational facilities, and the cost of environmental mitigation are all taken into consideration in the economic analysis. After consideration of these and other costs the reallocation of storage for M&I water supply has been shown to be the least costly of the alternatives evaluated.	Econ-Rec/Eco
598	The value of this resource has not been fully accounted for, that in reality it is more expensive than other alternatives. How does one put a dollar value on property where thousands of birds nest each year, and which also provides habitat for wintering and migrating birds. It's home to deer, coyote, beaver, muskrat, squirrels, rabbits and is visited by elk, bear and the occasional mountain lion. The	The value of the resources discussed have been taken into account in three ways. First, the effect of reductions in vegetative and wildlife resources is seen in large reductions in National Economic Development (NED) recreation benefits for activities such as wildlife viewing/photography, environmental interpretation/education, horseback riding, and picnicking without mature shade trees nearby;	Econ-Rec/Eco

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	affected areas are prime habitat of old growth cottonwood forest. Close to the metropolitan area and available to the public; it's a resource few cities the size of Denver can boast.	and to a lesser degree for all other recreational activities, by affecting aesthetic views (see Appendix T). Second, the value of these resources is partially expressed in terms of reductions in expenditures in the Chatfield area by visitors who opt to visit a substitute site with more mature vegetation that support wildlife communities instead of Chatfield State Park (see Appendix U). Third, the ecological values of these resources are accounted for by the cost of a compensatory mitigation plan (including monitoring, O&M, and adaptive management) that produces ecological functional units (EFUs) that equal or exceed the EFUs produced by the lost Chatfield resources over the 50-year period of analysis (see Appendix K).	
135	3.2.1 Regional and Local Geology, p. 3-4 - For a project that is so intertwined with earth materials and geology, the description in this section needs to be expanded. The first sentence under 5.3 Foundation, p.5, Post Liquefaction Stability Analyses, would help clarify the relation of local geology to the project area. There are many references in Appendix A stating that the Dawson Formation is the bedrock on which the embankment was constructed, e.g. Excerpts from Embankment Criteria and Performance Report. This, along with mention of the lithology of earth materials at the damsite is suggested.	Geology is considered to be sufficiently covered in relation to the action.	Edit N
570	Whooping Crane - The Draft FR/EIS and appendices contain inconsistent statements regarding the whooping crane. The documents state that this species has the potential to be affected by the proposed alternatives due to depletive effects in downstream reaches in other states (Draft FR/EIS, page 4-88), but recognize that this species has not been seen in Colorado since 2002 and has never been reported in the Chatfield Reservoir study area (Draft FR/EIS Appendix V, Draft Biological Assessment, page 26). The Draft FR/EIS elsewhere states, however, that the whooping crane has the potential to occur in the Chatfield Reservoir study area (Draft FR/EIS, page 4-97). The latter statement should be corrected. Please remove "whooping crane" from the last sentence in the first paragraph under Central Platte River Species, Nebraska on page 4-97 of the Draft FR/EIS.	Comment noted. The document recognizes the rarity of such a sighting of whooping crane at Chatfield, but the fact that it has not been noted at Chatfield does not preclude its presence from Chatfield.	Edit N

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78	On page 4-1 29 in the sixth paragraph of Section 4.17.3 of the FR/EIS needs to reference "(JJR 2011, Appendix N)" after the reference to "(EDAW 2010, Appendix M)."	FR/EIS has been revised per comment	Edit Y
78	On page 5-29 in the third paragraph of Section 5.5.8.1, the second sentence should be revised to read "Appendices M and N should be consulted for details about the recreation modifications."	FR/EIS has been revised per comment	Edit Y
78	First sentence of the third full paragraph on page 4-139 should be revised to delete the words "for the duration of their lease," and should read as follows: "Regardless of the final design details and construction cost estimate, the water providers affirm their support of the continued operation of a quality marina at Chatfield State Park, and to keep the marina operator financially whole."	Comment noted.	Edit Y
135	3.3.3 Groundwater Hydrologic Conditions and 4.3.2 Hydrology, Alternative 2 - There are several major discrepancies on p. 3-11, 3rd paragraph and p. 4-31, 4th paragraph, regarding the USGS and CDNR estimates for Denver Basin aquifer groundwater storage and potential recovery in millions of acre-feet.	The document was edited to ensure consistency.	Edit Y
135	CSR Draft, Page 3-5, under Seismic Analysis - "... current normal pool (and) the..."	FR/EIS has been revised per comment	Edit Y
135	Appendix A, Dam Safety Evaluation - Executive Summary, 3rd line - "that" is typed twice.	FR/EIS has been revised per comment	Edit Y
135	Appendix A - 7.0 Slope Stability, 7.1 General, p. 11, line 4 - should probably read, "(2) the outlet works section, Station 104+35, where the embankment..." (reference Appendix A, pgs. 12-14 and 17and plate B-5).	FR/EIS has been revised per comment	Edit Y
135	Appendix A - Piezometers 551D & 551S; p.23 - No location given; according to plate C-1 and C-6, they are probably 750' D.S. of station 87+50.	FR/EIS has been revised per comment	Edit Y
135	Appendix A - Piezometer 520A, p. 24 - should say plate C-31, Appendix C.	FR/EIS has been revised per comment	Edit Y
135	Appendix A - Page 16, Partial Pool Case, third sentence - a comma is needed after the word analyzed.	FR/EIS has been revised per comment	Edit Y
135	Appendix A - Page 19, Piezometer No. 507C - hydrostatic is misspelled	FR/EIS has been revised per comment	Edit Y

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135	Appendix A - 9.2 Instrumentation Analysis, p. 26 in longest paragraph, line 8 - "Inclinometer" is written twice.	FR/EIS has been revised per comment	Edit Y
135	Embankment Zoning Foundation..., Fig. 2, p. "4" (not numbered); Not very legible.	FR/EIS has been revised per comment	Edit Y
135	Antecedent Flood Study - Background Information, p.1, 2nd paragraph, next to last line; "... local cooperation (and) required the..."	FR/EIS has been revised per comment	Edit Y
135	Fig. 4 on p. 7 is not very legible.	Comment noted	Edit Y
135	Page 12, last paragraph, 4th sentence - "Under the most (conservative) operating criteria..."	FR/EIS has been revised per comment	Edit Y
135	Page 20, 2nd paragraph, next to last sentence - "A ratio of this antecedent precipitation to PMP can (then) be calculated and evaluated."	FR/EIS has been revised per comment	Edit Y
570	Plum Creek and its associated wetland and riparian resources have undergone substantial changes over the past few years and these changes continue to occur. We request that the Final FR/EIS describe these changes to provide a more accurate description of the current resources along Plum Creek. Language similar to the following could be added to Section 3.6.1.3 where riparian resources are discussed."Plum Creek and its associated wetland and riparian communities within Chatfield State Park are dynamic. Substantial accumulation of sediment in the upper reaches of Plum Creek has created channel changes and multiple channels, whilereaches of Plum Creek closer to the reservoir have severely down cut (Corps 2011, Figure 4-30). These changes in channel morphology have in turn affected wetland areas and riparian resources along Plum Creek. Areas of accumulated sediment have raised the channel bottom, buried existing riparian areas and wetlands in sediment, and shifted the channel away from existing wetland and riparian resources. Channel down cutting has substantially lowered the alluvial water table leaving wetlands and riparian vegetation without a supportive hydrology. There are many areas of dead trees and desiccated wetlands which border the down cut reaches. These changes to Plum Creek and its wetland and	FR/EIS has been revised per comment	Edit Y

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	riparian resources within the park are likely to continue to occur as major flow events allow the down culling to extend further up the channel."U.S. Army Corps of Engineers, Tri-Lakes Sedimentation Studies Area-Capacity Report; M.R.B. Sediment Memo 23a (Revised July 2011).		
570	We request that wording similar to the following be added to Section 1.3.3.2 on page 8 of the Executive Summary to more completely summarize the range of potential effects to vegetation and wildlife habitat associated with reservoir fluctuations for the many readers who will read only the Executive Summary of the Final FR/EIS. "Although a worst-case scenario approach was taken to ensure adequate mitigation would be planned and implemented, it is unlikely that all vegetation and wildlife habitat will be lost below the new reservoir high water line with reallocation (i.e., 5.444 feet msl for Alternative 3). Chapter 4 describes the more likely scenario. For example, for Alternative 3 the lower limit of persistent vegetation is estimated to be 5,438 feet msl with losses of upland vegetation and gains of wetland and riparian vegetation between 5,438 feet msl and 5,444 feet msl. The Tree Management Plan calls for retaining trees above 5,439 feet msl and using a monitoring and an adaptive management approach to subsequently remove trees between 5,439 feet msl and 5,444 feet msl on an as-needed basis to eliminate potential risks to visitors and dam safety."	FR/EIS has been revised per comment	Edit Y
570	We request that a change be made to the last sentence in Section 4.3.5 (Draft FR/EIS, page 4-37) so as to read: The Chatfield Water Providers will pursue development of an operations plan to minimize impacts as discussed in Section 7.5.2 of the CMP (Appendix K).This language change will maintain consistency with the provisions of the CMP which require development of an operations plan by the Water Providers for minimizing impacts. (See CMP, Section 7.5.2, pages 76-83; Draft FR/EIS, pages 4-161 and 4-162).	FR/EIS has been revised per comment	Edit Y
570	The Environmental Consequences section of the Draft FRiEIS concludes that the South Platte River below Chatfield Reservoir would have only minimal impacts under Alternative 3. (Draft FRiEIS, pages 4-51 to 4-52). The document contains additional statements	FR/EIS has been revised per comment	Edit Y

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	that managing the timing, duration, and amount of flow from Chatfield could be an important tool in enhancing aquatic biota in the South Platte River. (Draft FRiEIS, pages 4-51 to 4-52; 4-55). We request that the EIS qualify those statements by including language that: "The focus of any such flow management would be to improve habitat conditions above those that currently exist, by way of enhancement to the resource rather than required mitigation of adverse effects attributable to reallocation."		
570	Wildlife Habitat - In the Draft FR/EIS, long-term successional increases in riparian and wetland communities are not used to temper the estimates of wildlife habitat losses (DEIS, pages 4-81; 4-92; Tables 4-9 and 4-10, pages 4- 61 to 4-62; Tables 4-13 and 4-14, page 4-79). While we understand the benefit of disclosing a maximum impact scenario, it should be recognized that this approach is doubly conservative, insofar as the estimated changes in acreages assume both that all habitat will be lost below 5,444 feet msl and that no successional gains will be realized in wetland and riparian habitat types. We suggest the following be added to Section 4.8.3 Alternative 3 - 20,000 Acre-Foot Reallocation, at the end of the fifth paragraph on page 4-81 of the Draft FR/EIS to make this clear: The estimated losses of vegetation and wildlife habitat associated with inundation are doubly conservative because the estimated changes in acreages assume both that all wildlife habitat will be lost below 5,444 feet msl and that no successional gains will be realized in wetland and riparian habitat types. This conservative approach was taken to ensure adequate mitigation would be planned and implemented.	FR/EIS has been revised per comment	Edit Y
570	The following mitigation plan developments and refinements have occurred subsequent to the draft CMP, which should be noted in the Final FR/EIS: A. ERO oversaw the installation of 80 groundwater monitoring wells in potential onsite mitigation areas; B. ERO has been gathering information on the elevations of groundwater in the wells since May 2011. The data loggers record water in the wells every three hours; C. Muller coordinated obtaining topographic survey information for the potential mitigation areas; D. Muller oversaw soil sampling in the potential mitigation areas and evaluated the soils for permeability and other characteristics; E.	The BA and CMP have been revised to provide an update on progress made subsequent to the draft FR/EIS. On behalf of the Corps, ERO Resources, Muller Engineering, Ark Environmental, the water providers, and others have undertaken the following mitigation plan development and refinements subsequent to the draft CMP: 1) The installation of 80 groundwater monitoring wells in potential on-site mitigation areas. 2) Monitoring the elevations of groundwater in the wells since May 2011. 3) Obtaining topographic survey for the potential mitigation areas. 4) Muller oversaw soil sampling in the potential mitigation areas and evaluated the soils for permeability	Edit Y

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	Using the groundwater monitoring data, topographic survey, and soil test results, Muller evaluated potential sources of supportive hydrology in potential mitigation areas; F. Muller and ERO have refined the locations and limits of potential mitigation areas (several areas were eliminated from consideration due to lack of suitable hydrology); G. Muller has developed preliminary grading plans for the remaining potential mitigation areas; H. Muller is currently working with Colorado Parks and Wildlife to develop an access agreement to perform pump tests on several ponds along Plum Creek and the South Platte River to evaluate their suitability as sources of surface water for mitigation area; I. ERO has delineated wetlands in potential mitigation areas along Plum Creek and will do the same along the South Platte River. The delineations will be used to further refine mitigation area grading plans; J. Ark, Muller, ERO, and the Water Providers have been evaluating what types of vegetation communities may persist below 5,444 feet msl under various hydrologic scenarios to better understand potential impacts versus the currently assumed worst case of no vegetation below 5,444 feet msl; K. ERO is currently working on the habitat field evaluation to finalize the ecological functions model to refine the number of existing EFUs and EFU impacts based on existing site conditions.	and other characteristics. 5) Evaluated potential sources of supportive hydrology in potential mitigation areas using the groundwater monitoring data, topographic survey, and soil test results. 6) Refined the locations and limits of potential mitigation areas (several areas were eliminated from consideration due to lack of suitable hydrology). 7) Developed preliminary grading plans for the remaining potential mitigation areas. 8) Currently working with CDPW to develop an access agreement to perform pump tests on several ponds along Plum Creek and the South Platte River to evaluate their suitability as sources of surface water for mitigation areas. 9) Delineated wetlands in potential mitigation areas along Plum Creek and will do the same along the South Platte River. The delineations will be used to further refine mitigation area grading plans. 10) Evaluating what types of vegetation communities may persist below 5,444 feet msl under various hydrologic scenarios to better understand potential impacts versus the currently assumed worst case of no vegetation below 5,444 feet msl. 11) Working on the habitat field evaluation to finalize the ecological functions model to eventually determine the number of existing EFUs and EFU impacts based on existing site conditions. These activities will revise the design of the on-site mitigation presented in the draft FR/EIS and draft CMP.	
570	The description of Groundwater Hydrologic Conditions should recognize that the recoverable volumes referenced in Section 3.3.3 are regional estimates for the entire Denver Basin area and are not representative of what may be available from the aquifers on a localized basis (Draft FR/EIS, page 3-11).	Concur.	Edit Y
526	Despite the sparsity of the data set presented in Appendix Q, it's used as the basis for Table 3-3 and Figure 3-10 on page 3-51 of the DEIS. However, sample sizes and sampling areas were so small that the numbers are meaningless. Clearly, if standard errors are taken into account, there is no statistically meaningful difference between the three habitats (see comment for table). Even if these differences in species richness were statistically meaningful, they would be misleading. For example, based on DEIS Table 3-3 one might conclude that the largest variety of species was found in shrubland habitats. That's not the case. When all eight observations	Table 3-3 presents standard indices of species' richness and diversity, and these are based on the 4 stations of each habitat type and the 2 observation dates. However, it is correct that wetlands had the highest total number of species observed (31), followed by woodlands (23), and shrublands (21). This information will be added to the text (Section 3.8.1). The values for Simpson's Reciprocal Index of Diversity in Table 3-3 have been checked and confirmed. As noted in a previous response, the point count survey data was just one of many tools and resources considered by the Ecological Functions Technical Committee to develop the EFA	F&W-Birds

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	for each habitat type are combined, one can see that by far the largest species richness and species diversity in wetlands, not shrublands or woodlands. Incidentally, it's not clear how DEIS Table 3-3 values were calculated for Simpson's Reciprocal Index of Diversity. I've tried various methods of partitioning the data and averaging values for the partitions and cannot come up with the diversities reported in that table. I can only conclude that there's an error in the results presented in the DEIS.	which was used in the development of the Compensatory Mitigation Plan for impacted bird habitat.	
526, 529	The point counts did not include Upland habitat, although Upland was a Chatfield DEIS Mapping Habitat Unit and figures for Species Richness, Species Abundance, Support of Sensitive species and Limited Habitat are given for "Upland" in Table C-1, App.K. The DEIS suggests that the point counts in woodland included mature cottonwood forests, but the Draft Chatfield Ecological Functions Approach [Terrestrial], (no date but handwritten notes suggest 12/08) states that was not the case. A list of sensitive species (Table C-1) considered in the Ecological Functions Approach is not included. The reader is left to guess what these species are and whether the Ecological Function Values are appropriate. The relationship, if any, between Table 3-3 and Table C-1 also needs clarification. Are both based on the same point count data? The deficiencies of Table 3-3 are perhaps of only marginal direct importance to the DEIS. However, they leave me with the grave concern that the same kind of soft science used for gathering the data set for Appendix Q and analyzing it in Chapter 3 would also be used to develop EFIs (ecological functions indices) that get fed into a non-peer-reviewed EFA (ecological function approach) model that calculates EFVs (ecological function values) for EFUs (ecological function units). Frankly, I'd be far more comfortable if EFIs were determined by consulting some of the first rate birders and naturalists who have been observing wildlife at Chatfield for decades. No quick study made in two June days could possibly compete with their years of observation.	It is correct that the point counts did not include upland habitat, but the point count survey conducted in June was just one of many tools and resources considered by the Ecological Functions Technical Committee to develop Table C-1. As stated in the "Final Ecological Functions Approach for Terrestrial Habitats at Chatfield Reservoir" (ERO, 2009) under species richness and abundance "Available data from bird species lists collected by Chatfield State Park and Audubon, and surveys conducted by volunteers and experienced birders were reviewed and evaluated by the committee." Data included surveys conducted at Chatfield State Park by Hugh Kingery, Joey Kellner, and others, with additional supporting information from the Colorado Breeding Bird Atlas, Rocky Mountain Bird Observatory, Colorado Urban Wildlife Partnership, and Colorado Parks and Wildlife. Mature cottonwood forest was included in the June 2006 point counts. The "Final Ecological Functions Approach for Terrestrial Habitats at Chatfield Resservoir" (ERO, 2009) describes how sensitive species were selected by the committee. Sensitive species are defined as federal- or state-listed species, and species tracked by the Colorado Natural Heritage Program (CNHP) and Birds of Conservation Concern (BCC) for Regions 16 (Southern Rockies) and 18 (Shortgrass Prairie). A list of sensitive species based on the data sources described above was compiled and reviewed by the committee. Each sensitive species was placed into appropriate habitat(s) by season of occurrence based on literature accounts, professional opinion, and the consensus expertise of the committee. Each species was placed into one or more of the five mapped habitat types based on its primary season of use within the Chatfield basin: year-round, summer (breeding), winter (nonbreeding), and migration. Sensitive	F&W-Birds

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		species included bald eagle, golden eagle, Lewis' woodpecker, Swainson's hawk, burrowing owl, ovenbird, red-eyed vireo, northern harrier, ferruginous hawk, peregrine falcon, rufous hummingbird, Virginia's warbler, loggerhead shrike, Brewer's sparrow, and prairie falcon (Table 4 in ERO, 2009). There is no relationship between Tables 3-3 and C-1. Table 3.3 refers to dominant species based on the 2006 point counts. Table C-1 was developed by an Ecological Functions Technical Committee composed of local and state experts, including representatives from U.S. Fish and wildlife Service, Colorado Parks and Wildlife, U.S. Army Corps of Engineers, Audubon Society of Greater Denver and others. As described above, this table is based on numerous data sources thoroughly discussed and vetted by the Ecological Functions Technical Committee.	
529	Application of the protections of the Migratory Bird Treaty Act is unclear. Potential “take” of nesting birds, their eggs, nests and young could occur during tree clearing and also during demolition and reconstruction of recreational facilities. Appendix Z mentions this and states that measures will be taken to avoid impacts during the breeding season.	In Section 5 ("Schedule") of Appendix Z, it is stated that tree clearing would be carried out in compliance with the Migratory Bird Treaty Act to avoid impacts to migratory birds during migration and breeding periods at Chatfield. These time periods would be reviewed to identify appropriate times (most likely late fall and winter) for tree removal to ensure that migratory birds are not directly affected. Precautions would also be taken to avoid impacts to birds overwintering in the tree removal area. Take of migratory birds would also be avoided during demolition and construction of recreational facilities.	F&W-Birds
537	The document erroneously states that great horned owls and red-tailed hawks “can be sensitive to human disturbance so nests may be uncommon.” In fact they are common and tolerate people quite well. That claim cannot be used to lessen the mitigation needs for the old growth cottonwoods.	Chapter 3 of the FR/EIS will be revised to include information in Hugh Kingery's comment letter (August 14, 2012) that provides more site-specific information on nesting of great horned-owl and red-tailed hawk (as well as Swainson's hawk, Cooper's hawk, long-eared owl, and northern saw-whet owl).	F&W-Birds
460	4.5.3, p. 4-49 - In the second paragraph, aquatic community benefits from increased shallows may result from a proportional increase of shallow to deeper waters at Chatfield Reservoir. Cited acreage increase versus shoreline increase from 5,432 to 5,444 feet does not address the question. Calculating the ratio of shallow (<4 ft.) to deeper water over the entire reservoir at these two levels (before and after reallocation) would determine whether an increase in	There is a net increase of about 20 acres of shallow water (i.e., <4 ft.) between the 5,432 and 5,444 ft msl pool levels, but at 5,444 ft msl the proportion of shallow water to the total volume decreases slightly when compared to 5,432 ft msl. However, "Shoreline Development (D_L)" is a more useful parameter of lake morphometry as "it reflects the potential for greater development of littoral communities in proportion to the volume of the lake" (Wetzel,	F&W-Fish

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	proportion of shallows would occur.	1975,"Limnology," p.31). It is a measure of a lake's perimeter (i.e., shoreline) compared to the perimeter of a circle with an area equal to that of the lake. Comparison of the D_L values calculated for the 5,432 and 5,444 ft msl pool levels showed there was a slight increase (approximately 15%) in shoreline development at 5,444 ft msl compared to 5,432 ft msl. This suggests a slight increase in the littoral zone (area containing emergent, floating, and rooted aquatic plants) compared to the lake volume, and thus a slight increase in lake productivity relative to volume.	
334, 506, 537, 554	There does not appear to be any mitigation planned for any of the reservoir fishery effects. Why? Fisheries could be affected by changes in water quality (e.g. increased anoxic zones, lowered water clarity due to algae). The sport fishery in Chatfield Reservoir has high public value and must be protected at its current level of productivity. Should the Corps decide to proceed with the increased storage of water at the Chatfield site, aeration or some other type of effective circulation system should be implemented to mitigate the increased phosphorus loading. Reservoir Fisheries: EIS says "there will be positive environmental effects to the fisheries supported by the reservoir. The inundation of new organic material and associated expansion of the littoral zone of the reservoir would lead to what is commonly referred to as a 'new reservoir' effect." This is false. The new reservoir effect is a one-time benefit, which lasts for 2-3 years at most. It would only occur when the reservoir actually fills, and only when that water remains in the reservoir. In the alternative 3, since all the water rights are junior to existing ones, it may not occur for several years. When it does occur, it's likely the reservoir will be drawn down before the 'new reservoir' effect has a chance to occur. - The walleye spawn at Chatfield is currently a large component of the Parks and Wildlife strategy for stocking walleye. According to their document found at http://www.savechatfield.org/documents/ChatfieldReallocationImpacts.pdf the spawn will be negatively affected by "larger or more frequent water level fluctuations during the spawning season." These fluctuations will certainly occur in any year that there is water available to be stored.	Should alternative 3 be implemented, benefits are anticipated to reservoir fisheries resources, and impacts are not anticipated to the fish-rearing station downstream. Because of the critical importance of these fisheries, however, a Coordinated Reservoir Operations Plan will be developed to limit releases of water stored in the reallocated pool during critical seasonal periods. This adaptive management approach will minimize any adverse impacts to fish spawning or water supply to the downstream hatchery. The initial outline of a reservoir operation plan can be found in the CMP. The adaptive management process will allow the water providers, Corps, and resource agencies to be responsive to issues should they arise. Regarding water quality, monitoring will be conducted to identify water quality impacts. Potential adaptive management measures that may be implemented to address water quality issues that might arise include removal of terrestrial vegetation prior to inundation, adding an aeration/mixing system to limit stratification and anaerobic conditions, or management of inflows and outflows to manage flushing and hydraulic residence time. In addition, beyond the mitigation measures that are part of the tentatively Federally-Recommended Plan, the water providers propose to fund stream habitat improvements on up to 0.7 miles of the mainstem of the South Platte River above Chatfield Reservoir. Also, while this analysis does not suggest a significant loss of habitat downstream, to allay CDOW concerns, the water providers have agreed to pursue stream habitat improvement on up to 0.5 miles of the mainstem of the South Platte River downstream of Chatfield Reservoir. The specific sites and project designs for these measures will be selected in coordination with CDOW.	F&W-Fish

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	- The walleye (and smallmouth bass, and the stocked trout) rely heavily on naturally reproducing populations of gizzard shad. The shad spawn in the spring when the water will be high. When the water level drops, the spawn will be exposed and die. The forage of all the sport fish will disappear. - Similarly, the smallmouth bass fishery relies on natural reproduction, which will be terminated by the water fluctuations. I have fished all over America, and the smallmouth fishery in Chatfield is one of the best I have had the good fortune to fish. I'll be sad to lose it.		
628	Currently, mercury levels found in fish tissue are well below the advisory level but as water quality changes occur with reservoir fluctuation, the potential for mercury levels in fish will increase. This is because walleyes may need to switch to crayfish as a primary food source due to gizzard shad populations being negatively influenced by reservoir fluctuation. The primary link to mercury in the food chain is crayfish.	Mercury bioacumulation in tissues of walleye could be an issue with or without a reallocation. This is supported by the fact that Chatfield currently experiences low dissolved oxygen at depth from June to September and relatively elevated ratios of methyl to total mercury in zooplankton (per CWP). Also, if methylation is a problem, walleye and other piscivorous fish likely pick up mercury via consumption of gizzard shad among other food items, as shad are zooplanktivorous/omnivorous and would pick up mercury via their feeding on zooplankton and other benthic materials. Also, gizzard shad are susceptible to occasional dieoffs in the northern tier of their distributions, regardless of reservoir fluxuation. There are many factors at play that lend themselves transient perturbations of the structure of freshwater food webs beyond water level fluctuations. As such, it is not anticipated that Chatfield will experience issues as a result of mercury methylation.	F&W-fish
5, 32, 148, 211, 334, 506, 537, 554, 628, 809	There may be negative impacts to the fisheries. Changing the lake model by allowing major seasonal fluctuations in the water level could jeopardize the great walleye fishery. The smallmouth bass fishery is supported by natural reproduction which will be negatively impacted by more significant water level fluctuations during the spawning season, if dropping water levels dry up smallmouth bass eggs. Walleye can also be negatively impacted by lowering water levels in spring during spawning season.	Smallmouth bass spawning occurs in May and the first half of June. During this period, water levels in the reservoir would typically decrease by only a small amount (less than 1 foot, as shown in Figure 4-11 of the FR/EIS) and thus spawning would not be adversely affected. Walleye spawn earlier in the spring, beginning in mid-March. During this period, the reservoir would be filling and water levels would be increasing (as shown in Figure 4-11), thus negative impacts to spawning are not expected.	F&W-fish
5, 81, 102, 105, 123, 134, 157, 158, 168, 170, 171, 175, 183,	Impacts of the proposal will be massive, leading to the **loss of valuable riparian forest and wildlife habitat** as a result of large water level fluctuations and tree clearing.	The draft FR/EIS presents the estimated impacts for a variety of resources including cottonwood woodlands and other wildlife habitat. These impacts were conservatively estimated by assuming	F&W-Gen

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204, 211, 212, 223, 224, 238, 241, 247, 249, 263, 266, 266, 267, 270, 271, 272, 274, 275, 276, 277, 278, 281, 282, 283, 285, 286, 287, 288, 289, 292, 293, 294, 297, 298, 302, 310, 311, 312, 315, 317, 319, 321, 322, 327, 331, 332, 333, 335, 339, 340, 341, 342, 344, 345, 346, 349, 350, 352, 354, 361, 363, 365, 366, 367, 369, 370, 371, 372, 373, 374, 376, 377, 378, 380, 381, 384, 386, 387, 389, 390, 391, 392, 393, 395, 396, 397, 400, 401, 402, 403, 406, 407, 409, 410, 412, 413, 415, 417, 420, 423, 425, 427, 428, 433, 434, 438, 439, 446, 448, 453, 454, 457, 458, 464, 471, 472, 473, 475, 478, 480, 486, 487, 488, 489, 495, 496, 503, 505, 508, 509, 511, 512, 513, 514, 515, 516, 519, 521, 524, 526, 527, 528, 529, 531, 532, 533, 534, 535,		that all vegetation below the new high water elevation (5,444 feet msl for the Selected Plan) would be lost. These impacts will be mitigated as described in Chapter 4 of the draft FR/EIS and the CMP (Appendix K of the FR/EIS). Additionally, a Tree Management Plan (Appendix Z of the draft FR/EIS) was developed to limit tree clearing to the elevations where it is highly unlikely that the trees will survive inundation. Trees above these elevations will be monitored for health and only removed if they pose safety concerns for visitors, boaters or the dam.	

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536, 537, 538, 539, 540, 542, 543, 547, 548, 549, 550, 552, 553, 557, 558, 559, 561, 563, 565, 566, 572, 577, 579, 581, 582, 586, 589, 590, 591, 592, 593, 594, 595, 596, 598, 599, 601, 602, 603, 606, 609, 611, 615, 618, 620, 621, 622, 626, 629, 630, 632, 634, 635, 638, 639, 640, 641, 642, 643, 644, 646, 648, 650, 652, 653, 654, 666, 667, 671, 672, 673, 674, 676, 663, 659, 758, 797, 798, 799, 805, 806, 807, 808, 810, 811, 812, 817, 818, 820, 822, 823, 825-851, 874, 881			
5, 32, 67, 80, 102, 105, 153, 170, 183, 211, 212, 235, 263, 267, 280, 282, 285, 300, 302, 310, 322, 324, 340, 358, 361, 368, 381, 384, 389, 393, 395, 410, 412, 417, 433, 438, 439, 453, 454, 477, 483, 488, 503, 506, 521, 524, 509, 529, 539, 540, 558, 563, 602,	Ugly, smelly **mudflats** will be created during drawdowns. Mudflats could contain weedy species. The unavoidable "bathtub ring" effect from the severe fluctuation of water levels due to the extremely limited opportunity for acquiring the water will result in unhealthy and unsafe and even hazardous conditions for the humans and wildlife. It is common for people to get stuck or mired in the low water areas (mud flats) and require professional rescue. The reallocation will add up to 600 acres of hazardous zone to the most highly used state park in Colorado.	A comparison of the fluctuation zones of other reservoirs in the region indicates that it not very likely that an expanded fluctuation zone at Chatfield will be dominated by mud flats. The potential for weeds to invade the fluctuation zone of Chatfield will need to be monitored and if weeds do invade, controlled. A review of other reservoirs in the metro area indicated that they do not appear to have substantial weed issues within their fluctuation zones, although some reservoirs in southeast Colorado do have weed problems within the fluctuation zone. Mud flats were uncommon at these reservoirs and the substrate for these reservoirs was finer than the course sands and pea gravel that currently comprise the fluctuation zone at Chatfield Reservoir. This information will be included in the final FR/EIS.	Flux Zone

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603, 605, 631, 647, 666, 670, 663, 758, 797, 798, 803, 807, 808, 821, 878, 879			
352, 455, 509, 537	I would leave the existing cottonwood trees. They would likely survive if the actual water level is below the target elevation for 82% of the time, which was estimated in the study materials. This would lower environmental mitigation costs and also would address the concerns raised by many about the loss of bird habitat. The trees can always be removed at a later date if they do not survive. It would be irresponsible to deforest areas to accommodate 20,600 AF prior to there being concrete evidence that this amount of water can be captured by the junior water rights.	A Tree Management Plan (Appendix Z of the draft FR/EIS) was developed to limit tree clearing to the elevations where it is highly unlikely that the trees will survive inundation. Trees above these elevations will be monitored for health and only removed if they pose safety concerns for visitors, boaters or the dam. As described in the Tree Management Plan, waiting to remove trees at elevations below 5,439 until they die creates challenges for effective and safe tree removal and eventually presents safety concerns.	Flux Zone
460	Figure 4-18, p. 4-76 - The figure depicts that over the previous 20 years in the period of record (1980-2000), under Alternative 3 the reservoir would have filled to 5,444 feet in almost every year. This contrasts with the statement (Table 2-9, p. 2-67) that under Alternative 3, the pool elevation of 5,444 feet is predicted to be met in only 18 percent of years or the statement (4.9.3, p. 4-93) that maximum pool elevation is expected to be attained “only once every 3-4 years.” These discrepancies should be explained.	The statement in Table 2-9 is based on the information in Table 4-7 and the text in Section 4.3.3 (page 4-36); but it should refer to "18 percent of the days" in the Period of Record (POR) rather than "18 percent of the years" in the POR. The sentence will be revised to read "Target pool elevation (5,444 feet msl) is reached 18 percent of the days in the POR." The statement on page 4-93 is based on those years that reach 5,444 ft msl for at least 25% of the year; this occurs in 16 of the 59 modeled years of the POR (i.e., about once every 3-4 years). However, to be consistent with Figure 4-18, the statement will be revised to reflect that 5,444 ft msl is reached at least once in 42 of the 59 modeled years of the POR. The sentence will be revised to read as follows, "Although the maximum pool elevation under this alternative (i.e., 5,444 feet msl) is predicted to be attained at least once per year in 42 of the 59 years in the POR, the minimum levels could reach 5,423 feet msl (Figure 4-18)."	Flux Zone
526	In the book "From Grassland to Glacier (Second Edition)," it states "aquatic communities in general, and shoreline plant communities in particular, are poorly developed in reservoirs with wide daily or annual fluctuations in water level. Such fluctuations are a trait of many reservoirs constructed for temporary storage of water." This sounds like what will happen in Chatfield. It is unlikely that new wetlands will form in "backwater" areas and shoreline areas on gradual slopes (as stated in the report on page 4-81). According to	The impacts analysis took the conservative approach that all existing vegetation will be lost below the new high water elevation of 5,444 feet msl. As discussed in the Adaptive Management Plan (Appendix GG of the final FR/EIS), this maximum estimated impact may or may not occur and will be addressed through monitoring and adjustments to mitigation as needed. The Adaptive Management Plan also addresses the potential for weeds within the fluctuation zone. Additional information on the fluctuation zone is provided as	Flux Zone

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	the Chatfield Reservoir Elevation Duration - With Project Conditions (5444.0 ft msl Pool) table on page H-C-3 of Appendix H, 20% of the time annual reservoir elevations would be greater than 5443.8 ft msl and another 20% of the time annual reservoir elevations would be less than 5432.9 ft msl. During wet years reservoir elevations would be at least 10.9 feet higher than during dry ones. This kind of difference would be enough to dry up wetlands that "could become established" in wet years and drown those that “could become established” in dry years. Only the most tenacious weeds could survive such conditions. The Reallocation Project would not only wipe out established ecological communities, some of which are unique within Metropolitan Denver, it would also prevent them from re-establishing themselves on higher ground.	part of the final FR/EIS (Appendix HH). A comparative review of the fluctuation zones of reservoirs in the region provides some insights as to the likely characteristics of the fluctuation zone within the reallocated storage elevations at Chatfield Reservoir.	
529	The document must include a straightforward estimate of how water storage will occur and what the affects of that will be (at what elevations, timing, etc.). The description of such impacts is scattered through the DEIS and never discussed in depth in one place, certainly not in the Executive Summary where most readers will look. For example: 1) water users will be able to fill the entire reallocated space at Chatfield “less than 50% of the time” (4-162); 2) modeling suggests only 18% of the time (Table 2-9); 3) during the growing season, when most inflows occur, water levels will rarely reach elevations of 5440’, 5441’ and 5442’, perhaps 1 year out of 8 (4-65); 4) Enclosure 2 in Appendix BB suggests that the providers’ water will be available perhaps 3.5 years in 10; 5) in dry years, absence of water will create barren mud flats, a bathtub ring, dust, and weedy areas (4-76, 4-81), because lack of water will kill new vegetation trying to grow on the cleared ground.	The EIS is formatted in a way that focuses on resource categories, and thus, discussion can seem somewhat spread out through the EIS. Additional information on the fluctuation zone is provided as part of the final FR/EIS (Appendix HH). A comparative review of the fluctuation zones of reservoirs in the region provides some insights as to the likely characteristics of the fluctuation zone within the reallocated storage elevations at Chatfield Reservoir.	Flux Zone
578	Under plan 3, the maximum reservoir fluctuation would not be 12 feet, but 21 feet we believe, based on historical records. See Appendix BB. If this is accurate, this must be revised in the final EIS.	The report acknowledges that under Alternative 3, elevations would fluctuate up to 21 feet.	Flux Zone
794, 799, 809, 811, 818,	How will the Corps handle the silt problem as the water rises into new areas? There is always a lot of silt and debris when new areas are flooded with water. This will have a negative impact on fishing and boating.	The EIS notes that as the waterline rises and falls, fine sediments that either settle out, or become exposed would be susceptible to erosion by wind and water. The potential for erosion of fine sediments are disclosed in Chapter 4 of the DEIS, in Section 4.2 Geology and Soils. For discussion of potential impacts of wind	Flux Zone

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		erosion on soils on air quality, see Section 4.12. For more information on the potential impacts of sediment erosion on water quality, see Section 4.4. Chapter 4 also indicates that some trees would be killed as a result of the increase in pool elevation and attendant inundation under the proposed reallocation alternatives. Dead trees would be a potential hazard to boaters and other park visitors, and to dam operations. Because of these safety and logistical concerns, and because it would be difficult to remove trees after inundation occurs, it was decided that trees that would most likely be impacted by inundation should be removed before inundation occurs. A plan for tree removal can be found in App. Z. In general, under Alternative 3, the majority of trees between 5,432 and 5,439 feet msl would be removed prior to raising the pool elevation. Selected trees in some areas may be retained for fisheries or wildlife habitat. These areas will be determined based on a review by USACE, State Parks, and CDOW.	
93, 120, 223, 224, 414, 443, 869	We should begin to conserve water by not using it in hydrofracturing. Oil and gas drilling consumes enough water to conserve 79,000 households a year. Gas and oil seem to be outbidding the farmers right now for water. Hopefully that industry will not ruin under water ground water with their fracking technique. Will water from this project be used in hydrofracking?	Hydrofracking has not been discussed as a use of the water for this project to date.	Frac
411	p. ES2 - "…flood protection function cannot be compromised." But any reduction in flood storage will compromise flood protection. That the "impact on downstream flood frequency is negligible" is not clearly demonstrated.	Chatfield was designed to control a flood larger than a 500-year event. With the reallocation it will still have capacity to control a flood large than a 500-year event. Therefore there would be no impact on the ability to control floods up to and including the 500-year flood.	H&H
664	Trailmark Subdivision sits atop aquifers that are 25 feet under the homes. Who is going to cover the losses when homeowners have water problems in their basements?	The pool raise is only 12 feet and any impacts on groundwater levels would be adjacent to the reservoir. Groundwater will not change outside of Chatfield State Park.	H&H
211	Use South Platte River flow data from the past decade to construct a realistic model of what post-project reservoir levels would be, month by month, over a ten-year future period.	Refer to Appendix H. Reservoir levels were computed on a daily basis for the period 1942-2000 for both existing and future with project conditions.	H&H
501	The Chatfield Dam is classified as a "high hazard" dam. Should it fail or should the spillway be used for uncontrolled releases of flood waters held back in the storage afforded by the 20 feet of spillway	Refer to Appendix R for information on the Antecedent Flood Study.	H&H

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	depth the risk to life, limb and property greatly increases. Issues that impact the operation of Chatfield for flood control include 1) Ability to predict - statistical based forecasts of storm events that may be larger than estimated or occur more frequently; 2) Population growth - both increasing risk downstream, and increasing development upstream; 3) Change in runoff characteristics - runoff volumes will change with development; 4) Change in flood design parameters - we are relinquishing an essential flood design constraint (.4 pmf vs .5 pmf) on the unknown future development (runoff) and precipitation levels. Per Appendix R in the DEIS the original inflow flood design criteria (IDF) allowed for two storm events ,the first is an antecedent storm (a partial PMP) event that precedes the second, a main storm, a Probable Maximum Precipitation (100% PMP) storm. In 1972 the antecedent storm was assumed by the USACE to be 50% of the PMP. In 2012 the USACE is using a lessor amount predicted to range from 32% to 40% of the PMP. Why has the IDF been changed for the inflow design flood at Chatfield Dam?		
529	Since the Corps of Engineers acknowledges the importance of climate change as it relates to water management (see www.ccawwg.us <http://www.ccawwg.us/>) it is most troubling that this concern is not reflected in the DEIS. The DEIS also ignores a relevant study, “Colorado Front Range Climate Change Vulnerability Study” (JFRCCVS) (see Colorado Water Conservation Board, Climate Change). In the Executive Summary of the JFRCCVS final report, under "Applications for Water Utilities” is a key statement: “An important application note is that because of the uncertainty in all the climate models, it may be valuable and important to simulate water systems operations using multiple climate projections to reveal potential vulnerabilities specific to the hydrologic response to each projection...” While there is some uncertainty regarding the impacts of climate change, at a minimum the Corps should do a sensitivity analysis of flow regimes and project yield to assist in evaluating the fundamental merits of the proposed project. The DEIS does note (p. 4-37) “The Corps model uses inflows	If the future climate is wetter, there will less pool fluctuations and possibly a higher yield than has been evaluated. If the future climate is drier, there will be more of a demand for water and the yield could be reduced. The JFRCCVS is not ignored. It is cited on page 4-21, and it is described as being an important step in assessing potential changes in the timing and volume of hydrologic runoff for the years 2040 and 2070 as compared with 1950-1999.	H&H

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	during the 1942-2000 POR, which tend to be greater on average than that predicted for future conditions for all alternatives" then continues (p. 4-37) "This results in a greater probability of adequate mitigation." Likewise, the report should identify how project yield would be affected.		
815	Since the pool will be raised, in the event of a dam break, will the water now flow north as well as east? Does this put me in a flood area (to the north) and will I be required to purchase flood insurance?	No.	H&H
5, 66, 438, 529, 821	Stagnant water could become breeding grounds for mosquitoes and other insects which could carry diseases such as West Nile. The National Environmental Policy Act, Sec. 101 (42USC 4331) specifically mentions the need to address "..risk to health.." which leads to a question about the possible relationship between the "preferred" alternative and West Nile Virus. We are not in a position to say whether or not this is a legitimate concern but simply that this should be evaluated as it is a potential risk to public health.	It is true that increased water will lead to increased primary and secondary productivity. However, increased mosquito problems were not specifically addressed in the EIS. There are currently a significant amount of wetlands/stagnant water that support similar conditions for mosquitoes, thus mosquito problems are not resolved to require specific attention.	Health
8, 67, 81, 93, 102, 103, 105, 153, 168, 170, 175, 211, 212, 219, 223, 224, 238, 263, 266, 270, 272, 275, 276, 277, 278, 281, 283, 285, 287, 288, 293, 294, 297, 298, 300, 302, 311, 315, 317, 321, 327, 331, 332, 335, 340, 341, 342, 345, 346, 349, 350, 354, 361, 365, 366, 367, 369, 370, 371, 372, 373, 374, 377, 380, 386, 387, 390, 391, 402, 403, 409, 410, 412, 420, 423, 425,427,	The **project as currently planned doesn't show sufficient mitigation and/or can't be sufficiently mitigated.** No mitigation efforts will be able to bring back the trees or eliminate the mudflats; nor mitigate the water quality impacts related to fluctuating water levels. You can't mitigate for the loss of century old cottonwoods or free flowing stream segments on Deer Creek, Plum Creek, or the South Platte River. There is little to no value placed on this resource in and of itself. This state park is an ecological, cultural, and aesthetic resource that is open to the public. The endangered, threatened, and other protected species are merely listed and there seems to be little consideration of the vast numbers of species impacted and the significant diversity at this site that cannot be matched by any other potential alternative other than all of this can be mitigated.	Mitigation for lost mature cottonwood woodlands is addressed in the FR/EIS. The cottonwoods lost will be mitigated by a combination of providing new stands of cottonwoods that will mature over time and protecting existing stands of mature cottonwoods near Chatfield State Park. The draft Compensatory Mitigation Plan (CMP, Appendix K of the draft FR/EIS) calls for the following to compensate for the estimated loss of up to 42.5 acres of mature cottonwoods: (1) protect up to 22.5 acres of mature cottonwood woodlands within the defined off-site bird habitat complex near Chatfield State Park and (2) create up to 13 acres of specifically-designated cottonwood recruitment areas on-site and up to 10 acres off-site that will contribute toward the total compensatory mitigation goal of providing up to 796 EFUs (Section 5.0 of the draft CMP). In total, the compensatory mitigation for mature cottonwoods involves the creation and protection of about 45 acres of cottonwoods. Riverine segments associated with the reservoir are recognized in the EIS to have been influenced by the reservoir and will be inundated more frequently under a reallocation. While these segments will flow when the reservoir is not filled, the character of	Mit-

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434, 442, 453, 458, 475, 486, 488, 495, 496, 503, 508, 509, 512, 513, 514, 516, 519, 524, 527, 528, 529, 530, 531, 533, 534, 535, 537, 539, 542, 543, 547, 548, 549, 550, 552, 559, 561, 563, 566, 572, 578, 586, 589, 590, 591, 592, 601, 605, 609, 611, 615, 618, 620, 626, 629, 630, 631, 632, 634, 635, 638, 639, 640, 641, 642, 643, 644, 660, 676, 737, 758, 798, 809, 810, 821, 876, 878, 881, 882, 883, 885		the habitats will have changed to aquatic taxa more tolerant of a larger range of temperature, flow, and dissolved oxygen concentrations, such as those species that currently exist in the reservoir setting. Riverine wetlands associated with the inundated flowing sections of river will be mitigated on and off site. While benefits are focused on Preble's, birds, and wetlands, there are likely to be improvements to streams associated with the mitigation sites. In addition, the water users plan to do stream restoration mitigation activities for 0.5 miles on the South Platte River downstream of Chatfield and for 0.7 miles upstream of the 5,444 foot water level mark on the South Platte River upstream of Chatfield (this work is over and above the Federally Recommended Plan). As stated in the Executive Summary and Section 1.0 of the CMP, the target environmental resources are representative of a broad range of habitats and species that may be affected by reallocation. The mitigation plan is structured to provide a diversity of ecological functions that will benefit a broad range of wildlife including insects, amphibians, reptiles and mammals.	
417, 529, 537, 663, 866, 666, 676, 882, 883		The general location for the proposed off-site mitigation is shown on Figure 25 of Appendix K of the draft FR/EIS. Private properties would be protected on a willing seller basis. As discussed in Section 6.2.2 of Appendix K, it was assumed that about 15 percent of the private lands proposed for off-site mitigation would be protected. This was based on past similar large-scale protection efforts in the region and elsewhere. Protection of the off-site mitigation lands would be based on benefits to the target environmental resources and would not be predicated on public access. However, it is anticipated that lands protected by acquisition would likely be available for public access provided public use and access were consistent with management of the property to benefit the target environmental resources.	Mit-
285	The Ecological Functional Index has not been field-tested nor data sheet even developed. The Compensatory Mitigation Plan appears to be developed more to minimize the cost to the proponents rather	The EFU index is currently being field tested. The need for the next step was presented in Section 7.1.4 of the CMP. The weighting factors have been revised in coordination with FWS and will be	Mit-Accounting

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	than replace the resources that are negatively impacted by the preferred alternative. They proposed to provide incentives of 25% to 50% more credit in EFUs for target resources on private land that are protected habitats, have buffers, or are connected to other protected lands. However, the impacted lands at Chatfield are currently protected, well buffered, and connected to other protected lands especially along Plum Creek, Deer Creek, and the South Platte River. These lands should be replaced with similar quality lands without the additional 25% to 50% more credits.	presented in the revised CMP as part of the final FR/EIS.	
460, 537	4.2, p. C-16 - In the first paragraph, the base EFU mitigation value assigned for preserving existing offsite mitigation lands (15 percent of EFUs present) is garnered from preservation in perpetuity, "… protecting habitat against somewhat speculative and future events…" How the aftermath of fire, flood, and other rare but foreseeable occurrences at mitigation sites would be addressed under the CMP must be determined. 7.5, p. 75 - In the first full paragraph, details of how the CMP would address fire, flood, drought, or other natural or manmade events impacting the mitigation sites should be expanded and refined. While the CWP are not responsible for certain events impacting mitigation lands, the CMP should address remediation of sites following such events as an aspect of site management plans and address how EFUs lost or subsequently regained would be accounted for.	The CMP has been revised to make it clear that the properties will need to continue to be managed in a way that benefits the target environmental resources following rare but foreseeable occurrences such as floods and fires. This will also be made clear in the management plans for each protected property.	Mit-Accounting
460, 537	6.2.2, pp. 36 -38 - This section addresses whether needed EFUs for mitigation of project impacts can be achieved within offsite target habitat. We have little basis to judge whether 15 percent of existing acreage and EFUs on target habitat would be available (based on the prospect of cooperative landowners). However, we have significant concerns over application of weighting in the ecological functions approach, as exemplified here and detailed in Appendix C of Appendix K. In the example provided on p. 38 there is no explanation as to why weighting factors would be multiplied together rather than added to base values individually. When the same weighting of connectivity and buffers are calculated separately and then added to base EFUs, 739 rather than 791 mitigation EFUs are generated, a reduction of approximately 7 percent in credited	The weighting factors have been revised in coordination with FWS and the CMP and Biological Assessment will be revised to include the agreed upon weighting factors.	Mit-Accounting

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	mitigation.		
460	4.3.1, p. C-19 - Under the proposed weighting scheme, for bird habitat values mitigation sites in close proximity to Chatfield Reservoir, EFUs are weighted at 1.25. At sites further away they are weighted at 1.0. Mitigation near the site of impact is assumed more desirable, but traditionally gets full credit (1.0) while mitigation at sites further away usually get less (< 1.0). The proposed weighting inflates the value of both near and far offsite mitigation to birds.	The weighting factors have been revised in coordination with FWS and the CMP and Biological Assessment will be revised to include the agreed upon weighting factors.	Mit-Accounting
460	4.3.2, pp. C-19-20 - The USFWS agrees that buffers, as described, increase value of target mitigation habitat. However, assigning positive weighting values based on “average” buffer rather than “minimum” buffer width (see the last paragraph on C-19) ignores the likelihood that the closest human intrusion usually represents the greatest concern. USFWS recommends that minimum buffer width be used as the standard rather than average width. As for the actual weighting for presence of buffers, EFUs times 1.3, 1.5, or 1.6 depending on buffer width, we find the weighting scheme somewhat arbitrary. Habitat that would be lost at Chatfield Reservoir is largely buffered by preserved lands. To compensate for that loss, mitigation sites should be reasonably buffered from human impacts or perhaps receive reduced mitigation credit. In addition, credit for buffers on only one side of a targeted stream reach (while the other side of the stream remains vulnerable to infringing human impacts) doesn’t represent proportional buffer value. We recommend that the weighting scheme for buffers receive expert review. It appears that the weighting approach was not commented on by expert reviewers; they were only informed that weighting would be used in determining EFU “debits” and “credits.”	The weighting factors have been revised in coordination with FWS and the CMP and Biological Assessment will be revised to include the agreed upon weighting factors.	Mit-Accounting
460	4.3.3, pp. C-20-23 - Proposed weighting of mitigation sites for contribution to habitat connectivity, of up to 3.0 times the EFU value present, would provide incentives to link protected lands. However, habitat that would be impacted at Chatfield is part of a currently protected riparian system, and offsite lands targeted should also contribute to protected riparian connectivity. We believe that the weighting scheme overvalues mitigation efforts and may result in less than full mitigation values lost. Weighting could be given to	The weighting factors have been revised in coordination with FWS and the CMP and Biological Assessment will be revised to include the agreed upon weighting factors.	Mit-Accounting

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	targeted habitat in stream reaches where habitat quality is poor, with no requirement that site plans include measures to enhancement habitat present. Targeted mitigation lands currently experience a range of protections (see 4.19.9 of the Draft FR/EIS which indicates impacts would be minimized or mitigated given the current regulatory framework), so existing connectivity of corridors is likely to persist. Preble's has the capability to traverse stream reaches where habitat it less than optimal, as reflected in the designation of critical habitat where a stream reach represents only a travel corridor. Preble's populations are supported by both areas of high quality riparian habitat and lower quality travel corridors. Lack of barriers to movement is more critical than continuity of high quality habitat. The weighting scheme for connectivity could benefit from expert review. With a refined scheme in place, a technical committee may be needed to oversee complexities of site specific application.		
460	4.3.3, p. C-22. - Here and elsewhere in the document, the Preble's Draft Recovery Plan (cited as Service 2003) is not an official, signed USFWS draft plan under the ESA. In the past the USFWS has referred to it as a Working Draft.	The CMP, FR/EIS and BA will be revised to refer to the plan as a "Working Draft."	Mit-Accounting
460, 537	Base mitigation values assigned for preservation and enhancement of resources on offsite mitigation properties (15 percent of site EFUs) appear appropriate, but it appears that weighting factors inappropriately inflate EFU mitigation credits. Sites that would be impacted at Chatfield Reservoir support these same characteristics: proximity – they are at the project site; buffers – they are generally surrounded by protected lands; and, connectivity – they are part of more extensive riparian corridors extending upstream. Selected mitigation properties ideally would replicate these site characteristics and not be weighted to provide enhanced mitigation credit based on their presence. While weighting is justified in some cases, it would be more equitable if, under the CMP, both positive and negative weighting is employed to reflect whether or not mitigation sites include characteristics of impact sites where EFUs are lost.	The weighting factors have been revised in coordination with FWS and the CMP and Biological Assessment will be revised to include the agreed upon weighting factors.	Mit-Accounting
285, 789	Mitigation success needs to be based on actual evidence and not just percent of implementation completed. This document is not	The draft CMP (Appendix K of the draft FR/EIS) establishes success criteria for mitigation. The required annual monitoring will determine	Mit-Accounting

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	consistent on this point.	if the success criteria are met. Section 7.2 of the CMP presents a schedule that includes both implementation as well EFUs gained (i.e., success criteria met).	
285	Existing oxbow in streams and rivers should not be used in mitigation compensation. These are existing resources that should not be changed into a different resource type. If they happen to be used, the original resource should be included as an impacted resource and requires mitigation.	The draft CMP (Appendix K of the draft FR/EIS) does not target conversion of streams and oxbows to mitigation sites. These existing resources would not provide the "ecological lift" to produce the gain in EFUs needed for mitigation.	Mit-Accounting
509	Many of these areas have been largely undisturbed, leaving them as healthy and balanced wildlife and riparian areas. Park users will now be forced into these areas – changing their viability as healthy wildlife areas.	Park amenities are planned to be reasonably accommodated to support in-kind recreation opportunities, and are largely taking place in existing high use areas, and not requiring significant undisturbed areas that support high ecological values.	Mit-Accounting
529, 537	The description of impacts in the DEIS and its appendices are often inconsistent from section to section. For example, the Tree Management Plan (Appendix Z) states that at least 243.5 acres of cottonwood trees and 52.8 acres of willows will have to be removed below 5439'. The BA says 43 acres of native cottonwood and 211 acres of other trees will be removed. The Plan also states that an additional 61.1 acres of trees might have to be cut down between 5439 and 5444 ft. msl. This brings the total of trees removed to over 300 acres. Table 4-8 however shows only 185.7 acres of cottonwoods and 16.7 acres of sandbar willow would be lost due to inundation under Alternative 3. Other figures given are 474 acres of vegetation removed and 587 acres lost to inundation (ibid), 586 acres of wildlife habitat inundated (4-80), 618.54 acres of habitat for birds and other wildlife lost (5-14), and 676 acres of wildlife habitat lost (4-80). The text should be rewritten to accurately depict the predicted impacts of reduced flows on the South Platte downstream of Chatfield.	We will make additional clarifications in the main FR/EIS to help further explain the impact numbers that are presented. On page 4-80 of the main FR/EIS it is explained that the 676 acres of wildlife habitat, cited in Tables 4-13 and 4-14 and on page 4-80, includes the habitat between 5432 and 5444 ft msl, as well as the shoreline habitat, and the trees and shrubs that exist below 5432 ft msl. The total acres of wildlife habitat inundated not including the 90 acres of shoreline habitat is 586 acres (as explained on page 4-80; 676-90 = 586 acres). As indicated on page 4-80 the total acres inundated between 5432 and 5444 ft msl is 587 acres. The text on page 4-80 will be revised to further explain that the 587 acres includes ponds, shoreline, and non-habitat and that the 676 acres also includes wetlands. The value of 586 acres is also cited in the BA on page 5 and in Table 2. The 618.54 acres cited in Section 5.3.6 includes the 586 acres plus the 32.54 acres of habitat impacted by the relocation of recreational facilities, and the trail at Plum Creek (as cited in Table 2-9). The Tree Management Plan was developed primarily to estimate at what elevation trees would likely be killed due to inundation (based on inundation frequency and duration, and potential mortality of cottonwoods) and thus should be removed prior to raising the pool level; whereas the main FR/EIS should be referred to for the estimate of impacted acres of wildlife habitat under the alternatives.	Mit-Accounting

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529, 623	Weighting factors in the Ecological Functions Approach for off-site mitigation lead to a reduced acreage for mitigation and thus to lower costs for Alternative 3, which shows study bias for the preferred alternative.	Weighting factors are designed not for the intent of reducing acreage of land necessary to obtain full mitigation credit or costs, but to encourage mitigation to take place in an ecologically-based context (greater benefits for connected habitats with buffers that protect habitat and streams, etc.). In addition, adjustments to weighting factors have been made in consultation with FWS subsequent to the draft CMP. The revisions to the weighting factors will be included in the revised CMP.	Mit-Accounting
529, 537, 569	The DCMP states that “the first priority is onsite mitigation” (App. K, p. 14). The U.S. Fish and Wildlife Service echoes this concern in their FWCA report (App. X, p. 2). Unfortunately the current DCMP does not reflect that goal, as it depends heavily on off-site mitigation.	On-site mitigation is a priority for the CMP. The amount and the locations of on-site mitigation have been coordinated with CPW. On-site mitigation is a balance between maximizing the amount of mitigation which will occur on-site, suitable locations for the mitigation and maintaining a mix of habitats within the park (i.e., every bit of ground within the park is not available for mitigation).	Mit-Accounting
529, 537	Upland areas destined for conversion to wetlands should be thoroughly evaluated first. There’s a reason why they are grasslands rather than wetlands, and conversion may be difficult and expensive. Since created wetlands are not likely to replace the functions of those already in existence, we recommend that replacement acreage exceed lost acreage by a ratio of 2:1. Under FWS Region 6 wetland mitigation policy, compensatory mitigation through creation of wetland should occur at a recommended ratio of no less than 2:1. We have two examples at Chatfield of failed wetlands creation: the CDOT mitigation wetlands at Denver Botanic Gardens and the wetlands created to cleanse effluent from Lockheed-Martin on the west side of the park. The CDOT wetlands have never become fully functional due to lack of a reliable water source, and the Lockheed-Martin wetlands are completely inactive due to the decision by CDPHE to route the effluent by pipeline directly into the South Platte River. The 404 permit mitigation requirement for the CDOT wetlands has never been satisfied. Although they are included in the proposed mitigation for the Reallocation, they are in fact CDOT’s responsibility and the project should not claim credit for them. Any wetlands created for mitigation, as well as “recruitment areas” for cottonwoods, should have a guaranteed source of water with water	Hydrology will be an important factor for creating wetlands for compensatory mitigation at Chatfield State Park. The CMP recognizes this and continued work has been done regarding determining a supportive hydrology for created wetlands. Eighty ground water monitoring wells have been installed and monitored and pump tests of potential surface water sources will be done in 2013. It is important to remember that many of the wetlands at Chatfield State Park were uplands prior to the construction of Chatfield Reservoir. The areas designated for "cottonwood regeneration" are intended, over time, to help replace the functions of the lost mature cottonwood woodlands. The mitigation plan takes a functional approach to mitigation as opposed to using mitigation ratios. The mature cottonwoods on private lands proposed for protection occur near Chatfield State Park and occur within Preble's designated critical habitat. So as the commenter points out, will be important for sustaining T&E species.	Mit-Accounting

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	rights and a detailed management plan to ensure their success.		
529	ASGD has earlier expressed concern that the natural wetlands now in existence on the west side of Plum Creek are proposed as a site for wetlands creation and enhancement as part of the mitigation (email from Greetz to Gwyn Jarret, 4/25/12). These wetlands are already a diverse and functioning part of the natural process of stream dynamics at Plum Creek, a typical “sand creek” whose course can change from year to year. Attempting to stabilize and enhance such a functioning system may do more damage than good, and we recommend that further, objective analysis of the site be done before any mitigation is attempted there.	The CMP does not call for creating wetlands where functioning wetlands already occur. In 2012, wetlands were delineated in all areas proposed for mitigation to ensure that existing wetlands would be identified and considered for mitigation.	Mit-Accounting
529	Off-site private lands targeted for mitigation uses weighting factors for protection, proximity to impacts, connectivity, and the presence of buffers (Appendix K, p.33). However, the lands in Chatfield State Park impacted by Alt. 3 are currently protected, buffered and connected to other protected lands. Either their EFU values should also be weighted for those factors, so that they should be replaced with similar quality lands, or replacement lands should not receive extra weight for protection, buffering or connectivity. The use of the weighting factors results in an overall lower acreage of required mitigation lands and considerable cost savings to the project proponents.	Benefits for off-site lands begin at 15% of full crediting prior to weighting factors being applied. Weighting factors are designed not for the intent of reducing acreage of land necessary to obtain full mitigation credit, but to encourage mitigation to take place in an ecologically-based context (greater benefits for connected habitats with buffers that protect habitat and streams, etc.). In addition, adjustments to weighting factors presented in the draft CMP were made in consultation with FWS and are presented in the revised Biological Assessment and CMP in the final FR/EIS.	Mit-Accounting
529, 537	The Corps usually requires at least a 1:1 ratio for replacement of wetland acreage with in-kind habitat, but the proposed mitigation does not reach this basic level. The use of the EFA system obscures the ratio of mitigation to habitat lost. Compare the examples cited in App. C of App. K, where these ratios were 6.5 acres protected to 1 acre lost and 3 acres protected to 1 acre lost. Since successful creation of wetlands is uncertain and mature cottonwood forests cannot be replaced within the project’s time frame, we suggest a ratio of at least 2:1.	As discussed in the CMP (Appendix K of the FR/EIS), there is substantial geographic overlap in the target environmental resources. The CMP does establish minimum EFU mitigation objectives for each resource to ensure that a diversity of mitigation is provided and that mitigation is not weighted toward a single resource. Using the ecological functional approach avoids arbitrary identification of size of the mitigation areas and allows for a consistent ecologically-based method for ensuring that replacement is based on function.	Mit-Accounting
529, 537	The model for bird habitat was reviewed only by Corps personnel, while the model for Preble’s mouse habitat was reviewed by an outside consultant and FACWet, a Colorado-specific model developed by CSU, EPA, CDOT and others, was used for wetlands. The bird habitat model also needs independent outside peer review,	Model review was conducted according to Corps policies, and all modeling was reviewed by reviewers outside of the Omaha District Corps of Engineers. Reviewers were selected based on qualifications and uniqueness of the resource. For example, Preble's mouse expertise is limited due to limited range of the	Mit-Accounting

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	especially in light of comments made by the reviewer about the need to review assumptions behind using the June 2006 point counts (C-2, App. K). The CMP states that the EFI has not been field tested or calibrated, and it was created solely for the Chatfield project. This makes outside peer review even more important.	resources, and therefore, local expertise was obtained. Application of the modeling (as an aspect of overall review of the report and appendices) was also reviewed outside of the Corps of Engineers organization via the independent external peer review process.	
529, 537	Comments by Ann Bonnell and Cecily Mui on the PDEIS stated that 1) EFVs for bird habitat support of sensitive species did not match the Rating Criteria Chart or the values agreed upon by the Ecological Functions Technical Committee in their final meeting, and 2) the values for Upland Bird Species Richness and Species Abundance have been lowered from the values agreed upon by the committee. We consider the rationale given for the changes inadequate - that they are explained in the Ecological Functions Approach for Terrestrial Habitat at Chatfield Reservoir (ERO, December 16, 2009). That document – App. C of App.K – contains only a general discussion of the EFA and does not reveal why those specific values were changed. ASGD feels it was inappropriate to reject the recommendations of the committee unless there was a very clear and unbiased reason to do so. We suggest that the EFVs and EFI be revised to reflect the science-based recommendations of the committee.	The EFV values match the values presented and discussed at the final Ecological Function Technical Committee meeting held on December 3, 2008 and summarized in meeting minutes attached as Appendix H of the Ecological Functions Approach. Prior to the December 3, 2008 meeting, a series of emails were exchanged between the committee members that included Ann Bonnell of Audubon Society of Greater Denver, and Cecily Mui of South Suburban Parks and Recreation. Based on these emails, a draft of proposed changes to EFV rating criteria and values was distributed to the committee members with all proposed changes highlighted for discussion. The specific changes to upland bird species richness and species abundance cited in the comment were initiated by Pete Plage of the U.S. Fish and Wildlife Service in an email dated October 30, 2008. It was Mr. Plage's opinion that the 0.75 value for both these functions was too high and suggested a value of 0.50 for both. These changes and others were discussed thoroughly at the December 3, 2008 meeting and, while not reaching consensus, the majority recommendation was to accept the lower numbers. All the correspondence and meeting summaries discussed in this comment were provided in Appendix H of the Ecological Functions Approach for Terrestrial Habitats at Chatfield Reservoir (ERO, 2009).	Mit-Accounting
537	Table 4-8 should be expanded to include losses of different species of wetland plants because every reasonable effort should be made to replicate those diverse ecosystems with the created wetlands.	Table 4-8 in the Draft FR/EIS displays vegetation and feature losses due to inundation by vegetation categories and within each category by dominant plant species. This information is adequate for the Draft FR/EIS to disclose effects to vegetation. The mitigation for wetland impacts is functionally based and Section 7.1.4 of the CMP (Appendix K of the Draft FR/EIS) discusses how a variety of wetland types will be considered in the development and crediting of wetland mitigation.	Mit-Accounting
537	Estimates of natural recruitment of cottonwoods above the proposed max pool (Table 4-9) should be given little or no credit for mitigation	The impact analysis and mitigation plan for Alternative 3 assumed worst case, that all trees were lost below 5444 ft msl, and no credit	Mit-Accounting

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	in advance of actually documenting success on the ground, particularly if not accompanied by significant planting of 2” to 3” saplings, a detailed management plan, and dedicated funding for management, maintenance, and replacement when needed.	was given for natural recruitment.	
537	"Protecting up to 22.5 acres of existing mature cottonwood habitat in offsite areas, and designating up to 10 acres of off-site areas for recruitment..." We are dumbfounded that the Corps believes this is adequate mitigation for the essentially irreplaceable old growth trees.	Protection of 22.5 acres of existing mature cottonwood habitat, and 10 acres of designated recruitment in off-site areas are a part of the overall permanent protection of habitat associated with the target environmental resources (Preble’s, wetlands, and birds) from an estimated 888 acres of offsite mitigation. These acres are meant to ensure that the off-site mitigation for target resources at least includes that amount of acres specific to mature cottonwood habitat and recruitment areas. The combined 32.5 acres of off-site mitigation, along with the 10 acres of on-site mitigation, will compensate for the 42.5 acres of impacts to mature cottonwood habitat. See Section 6.2.2. of Appendix K (Compensatory Mitigation Plan).	Mit-Accounting
537, 578	The majority of mitigation depends on protecting existing habitat through fee title or permanent easement, and we object to this approach. It is just protecting something that already exists and replaces no lost values. That is why the Corps has required as much as a 10:1 ratio when using protection of existing habitat to mitigate for wetland losses as a condition to issuing a Section 404 permit under the Clean Water Act.	Benefits for off-site lands begins at 15% of full crediting prior to weighting factors being applied. Weighting factors are considered for increasing credit not for the intent of reducing acreage of land necessary to obtain full mitigation credit, but to encourage mitigation to take place in an ecologically based context (greater benefits for connected habitats with buffers that protect habitat and streams, etc.). Loss or fragmentation of riparian areas is common in association with urbanization, of which the Plum Creek watershed is highly susceptible to. This watershed based mitigation approach is felt to be appropriate, as many of the target resources are susceptible to urban development pressures.	Mit-accounting
537	The FACWet model should be modified to ensure that the forest habitat type receives as much focus as birds in the mitigation planning because those trees in combination with the shrub habitat and wetlands support a very diverse and valuable community of species.	The plan ensures that the off-site mitigation for target resources at least includes 22.5 acres of mature cottonwood, and 10 acres of cottonwood recruitment areas to capture the known benefits that the forests provide. Models, as used in this report, are specifically for mitigation planning purposes.	Mit-Accounting
576	In the CMP, consider increasing the compensation for loss of mature cottonwoods above the proposed 1: 1 acreage. In EPA's experience across the country and in the scientific supporting literature, offsetting functional loss has a time lag and is not always	Comment noted. Monitoring will be used to determine mitigation success including the mitigation for impacts to cottonwoods. See response to comment 231.	Mit-Accounting

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	successful: restoration efforts often face a high failure rate. These lessons seem particularly pertinent to replacing mature (30+ year old) cottonwoods. Enhanced mitigation recommendations for this type of resource generally include a replacement ratio in the range 1:5 to 1:15.		
628	There are conflicting estimates of the number of acres of cottonwood bird habitat that would be impacted. The number of impacted acres needs to be clarified. While the CMP indicates 42.5 acres of mature cottonwood bird habitat are impacted, the proposed "Tree Clearing Plan" in a report by Tetra Tech shows 243.5 acres of trees being removed below elevation of 5439 feet. No estimate of additional woodland area that might be impacted between 5439 and 5444 feet has been provided.	We will make additional clarifications in the main FR/EIS to help further explain the impact numbers that are presented. The cottonwoods lost will be mitigated by a combination of providing new stands of cottonwoods that will mature over time and protecting existing stands of mature cottonwoods near Chatfield State Park. The draft Compensatory Mitigation Plan (CMP, Appendix K of the draft FR/EIS) calls for the following to compensate for the estimated loss of up to 42.5 acres of mature cottonwoods: Protect up to 22.5 acres of mature cottonwood woodlands within the defined off-site bird habitat complex near Chatfield State Park; create up to 13 acres of specifically designated cottonwood recruitment areas on-site and up to 10 acres off-site that will contribute toward the total compensatory mitigation goal of providing up to 796 EFUs (Section 5.0 of the draft CMP). In total, the compensatory mitigation for mature cottonwoods involves the creation and protection of about 45 acres of cottonwoods. These acres are meant to ensure that the off-site mitigation for target resources at least includes that amount of acres specific to mature cottonwood habitat and recruitment areas.	Mit-Accounting
628	As a condition of the Corps' approval of the reallocation, all habitats should be assessed and all conservation or other agreements should be finalized for the acquisition of such habitat prior to storing any water in the reallocated space. It also appears that areas that have been identified for enhancement (ex. Sugar Creek) are existing critical habitat. It seems that lost habitat is being replaced with existing critical habitat. If Chatfield State Park loses habitat, such habitat should be replaced with newly created or suitable unoccupied habitat that is not within the already designated critical habitat. If existing critical habitat is enhanced an agreed upon ratio of enhanced acres versus lost acres will need to be developed.	The Corps and FWS are consulting under Section 7 of the ESA regarding impacts to T&E species. The Corps prepared a draft Biological Assessment (BA) which was included in the draft FR/EIS (Appendix V). Regarding the timing of mitigation, the Corps will require mitigation to be accomplished concurrent with mitigation. Milestones have been established to ensure mitigation is met prior to water providers being able to fully use the reallocated storage. Impacts of the reallocation include approximately 155 acres of designated critical habitat along the South Platte River and Plum Creek. As a matter of policy, the FWS requires that critical habitat be mitigated within the critical habitat unit in which the impact has taken place. Sugar Creek was selected as the most appropriate site to mitigate impacts to the South Platte critical habitat unit.	Mit-Accounting

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211, 493, 509	Where is the land for mitigation to be found? Postal zip code 80125, where Chatfield is located, has only four land parcels larger than four acres currently for sale, and only one of them has any riparian habitat. To acquire 587 acres in zip code 80125 – almost entirely in widely separated lots that lack woodlands – would cost, with current average real estate valuations, over $23 million. No specific lands have been clearly identified for such. Both Plum Creek and Sugar Creek, cited as privately-owned lands, are all contemplated as the solution for off-site mitigation. The owners of these proposed areas have not even been identified nor how this group will go about acquiring these areas. This contradicts the planning constraint (p. ES-5) that cites: “The project should not rely on the use of others’ land or on their project capability.” - I don't understand the reasoning behind some of the constraints. For example, the constraint just mentioned, that any alternative could not be on others’ land, appears to unnecessarily bias the study in favor of the Chatfield Reallocation, since it (should have) automatically eliminated from consideration all private land options. The fact that the CWCB could have overseen contracting and enforcement of contracts for projects on private land makes this constraint seem unnecessary.	The general location for the proposed off-site mitigation is shown on Figure 25 of Appendix K of the draft FR/EIS. Private properties would be protected on a willing seller basis. As discussed in Section 6.2.2 of Appendix K, it was assumed that about 15 percent of the private lands proposed for off-site mitigation would be protected. This was based on past similar large-scale protection efforts in the region and elsewhere. Protection of the off-site mitigation lands would be based on benefits to the target environmental resources and would not be predicated on public access. However, it is anticipated that lands protected by acquisition would likely be available for public access provided public use and access were consistent with management of the property to benefit the target environmental resources. Compensatory mitigation costs impacts to the target environmental resources were estimated to be about $71 million (Section 8.2.6 of the CMP). The planning constraints relate to the project purpose and not compensatory mitigation.	Mit-Land
285, 479	Conservation easements need to be held by a conservation trust or organization. Enforcing the terms of the conservation easement does not automatically implement themselves. Someone needs to oversee and monitor the lands to assure that they are managed as intended.	Section 7.4.2 of the draft CMP (Appendix K of the draft FR/EIS) states that the Chatfield Water Providers will have the option of transferring ownership of lands, conservation easements, and management of preserved off-site mitigation lands to a land trust, local government, or other qualified land management entity.	Mit-Land
648	How many hundred of millions of tax payer dollars have been spent in protecting or avoiding habitat during publicly funded construction projects over the years? How many private projects have been stopped or precluded by the possibility of the Preble's Meadow Jumping Mouse habitat issue. Now suddenly it's no big issue, it's going to be mitigated by "hopefully" leasing land rights from cooperative landowners upstream. Unfortunately that will remain private land and not a place the public can go to observe nature's wonders. Right or wrong, the government should be consistent.	All applicable environmental laws/regulations and federal planning guidance were followed in completing this study.	Mit-Land

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372, 509, 605	The adjacent land to the park, particularly the 400+ acres within the horseshoe center of the park, is not being considered at all for mitigation. The irony here is that this land is owned by Shea Properties, the developer of Highlands Ranch – and the same entity which controls the Board for Centennial Water – their sole water provider. Acquisition of this land, at a minimum, should be a requirement for this project to proceed.	All lands that may be available by willing sellers that provide suitable conditions required for mitigation would be considered.	Mit-Land
529	Constraints include “the project should not rely on the use of others’ land or on their project capability” (ES-5). This is also a study-specific constraint (p. 2-6). Mitigation (a part of the project) of the loss of wetlands, bird and Preble’s mouse habitat calls for land acquisition in fee simple or conservation easements on private lands – others’ lands. The mitigation for Preble’s habitat in the South Platte River Critical Habitat Unit is on U.S. Forest Service land and involves redesign of a Douglas County road. The DEIS does not say who owns the right of way but it is certainly not held by the Corps. We are not sure what this constraint actually means – the project should not rely on private lands? On lands of other federal, state or local agencies?	ER 1105-2-100 describes that the District Commander shall consider utilization of both public and private lands, and select the lands that represent the best balance of costs, effectiveness, and acceptability consistent with incremental cost analysis guidance. This constraint was developed specifically in order to help screen alternatives where water sources or infrastructure components would lie in areas that clearly would not be available for purchase or create a significant obstacle for development.	Mit-Land
578	Conservation easements are not a replacement value for lost habitat at Chatfield. Public access and viewing is guaranteed only with fee title and transfer to public ownership. All mitigation should be in fee.	The off-site mitigation will likely first focus on the fee title acquisition of private lands from willing landowners of lands suitable for mitigation. The lands acquired for mitigation will be protected in perpetuity with a conservation easement or other suitable protective instrument. Where the landowner is not willing to sell the property in fee title, a conservation easement will be pursued. The off-site mitigation is for impacts to the target environmental resources and is not intended to provide additional areas for public access and use. However, it is anticipated that an additional benefit of the protected off-site mitigation properties is that some of the protected properties will become available for public access.	Mit-Land
628	One of the most significant impacts of the Reallocation on visitors to Chatfield is the loss of approximately 587 acres of recreational land and wildlife habitat. This area is considered “lost” because it will be intermittently inundated with water stored in the reallocated space and is anticipated to be a large mudflat the remainder of the time. In addition, the reallocated storage space and more specifically the	Regarding distance to water, boat ramps would be constructed to extend to the elevation of the existing ramps in order to operate at low water levels (Appendix M, p. 3-2). The swimming beach area will be regraded at a greater slope to minimize the distance between shore facilities and the water edge at low water conditions (Appendix M, p. 3-6). For picnic areas inundated at 5444 ft msl, the	mit-land

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	587 acres of upland area is located at an elevation with more gentle topography, creating shallow water levels with increased boating hazards. Consequently, no additional boatable acreage for motorized vessels is expected to be created within Chatfield Reservoir making these acres a net loss for recreation and wildlife habitat and decreasing the opportunity for viewing wildlife when there are increasing demands for this recreational activity.	same number, type, and capacity facilities would be developed at a higher elevation, in reasonable proximity to restrooms and parking. While it is documented that many Chatfield State Park visitors would not experience the same level of recreational enjoyment after reallocation (Appendix T), recreational activities will still be allowed to occur in areas affected by water level fluctuations. In fact, in a review of other reservoirs in the region, some with reservoir pools that fluctuate to a greater degree than the selected alternative, indicate that people will in fact still take advantage of recreational opportunities. Two of the reservoirs reviewed (Cherry Creek and Jackson) had swim beaches managed by CDPW. At Cherry Creek Reservoir, the distance from the bathroom/change facilities to the water's edge was about 380 feet. At Jackson Reservoir, the distance from the bathroom/change facilities to the start of the swim beach was about 615 feet and the closest porta-potty was about 280 feet. Jackson Lake State Park advertises that it is ranked as one of the top 15 park beaches by a national camping service (CSP, 2010b) and Cherry Creek State Park has an annual visitation of about 1.4 million (FY 2007-2008), many of whom use the swim beach. It appears visitors are willing to walk greater distances if the swim beach is of high quality. The water providers are currently working with the Colorado Parks and Wildlife to provide assurances of a like recreational experience, and to compensate State Parks for lost revenue or increased costs. The reservoir fluctuation review also indicates that mud flats are unlikely to be an issue with the expanded fluctuation zone for the selected plan. Mud flats were uncommon at these reservoirs and the substrate for these reservoirs was finer than the course sands and pea gravel that currently comprise the fluctuation zone at Chatfield Reservoir. This information will be included in the final FR/EIS. The National Park Service's October 4, 2012 letter (Appendix S, Attachment 3) states that this change of land acres to water acres is not a section 6(f) (3) conversion to non-recreational uses under the Land and Water Conservation Fund program; therefore, replacement of this land acreage is not required.	

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628	In addition to any mitigation imposed by the DEIS, Colorado state law requires the Chatfield Water Providers to apply for, obtain and implement a Fish and Wildlife Mitigation Plan pursuant to the process outlined in C.R.S. § 37-60-122.2.	The water users are currently negotiating with the state regarding state requirements.	Mit-NonFed
285	The escrow track for mitigation presents a confusing situation. Mitigation needs to be completely funded whether it is escrowed up front or as the work is performed. There seems to be other strategies in the development of the escrow track for mitigation that may have hidden from the public.	The estimated costs for environmental mitigation are substantial; estimated to be about $71 million and the mitigation will occur over more than a decade. Requiring funding of the full estimated cost of the mitigation up front will provide increased certainty to the mitigation process and help ensure that the mitigation, monitoring and reporting are done in a timely manner.	Mit-Responsibility
460	1.3.4.6, p. ES-12 - This section states that CDNR, "…through its agencies and nonfederal project partners will complete 100% of the integral work..." and that "…said work will involve every phase of design and construction…" For CDNR to maintain responsibility for project implementation (with Corps oversight) is consistent with our understanding of agency roles. Other sections of the Draft FR/EIS and especially Appendix K appear to contradict this by providing CWP broad authority to independently make decisions regarding project implementation.	Comment noted. The Corps will retain authority over project implementation. This will be made clear in the final FR/EIS.	Mit-Responsibility
460, 554	7.1.3, p. 57 - In the last paragraph, the Project Coordination Team would be given no opportunity to review and comment on CWP protection of properties or buffers within the target area. Given unforeseen complexities of protection efforts, this provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.	The Corps will retain oversight authority and final over project implementation. This will be made clear in the final FR/EIS and CMP.	Mit-Responsibility
460, 554	7.1.3, p. 58 - Property management plans developed by CWP should be subject to Project Coordination Team approval, not just review and comment as stated in the second paragraph. This provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.	Comment noted. The Corps will retain oversight authority and final approval over project implementation. This will be made clear in the final FR/EIS.	Mit-Responsibility
460	7.1.3, pp. 58-59 - Required components of mitigation plans, as listed, are acceptable. However, failure to protect existing EFUs through negligent management should result in loss of EFU credits. It should also be clear that management plans will be required to	All protected properties will require development of a management plan that will require management of the property consistent with the benefit of the target environmental resources for which the property was protected. The requirements of the management plans are	Mit-Responsibility

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	address management in perpetuity.	presented in Section 7.1.3 of the CMP. These requirements were reviewed with the FWS and FWS concurred that the requirements were appropriate.	
460	7.3, p. 68 - The fourth bullet addresses impacts to the Preble's and its habitat. Our biological opinion would set terms and conditions that the Corps would implement through decision documents and agreements. It is the Corps' responsibility to see that terms and conditions are implemented and to maintain authority over their implementation. The biological opinion would also address circumstances where formal consultation under section 7 of the ESA would be reinitiated.	Comment noted.	Mit-Responsibility
460, 537, 554	7.3, p. 69 - The first bulleted statement provides the Chatfield Reservoir Mitigation Company "exclusive control over mitigation activities to satisfy the mitigation obligations described in the project decision document." This provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.	Comment noted. The Corps will retain oversight authority and final over project implementation. This will be made clear in the final FR/EIS.	Mit-Responsibility
460, 529, 537, 554	7.3, p. 70 - The first paragraph appears contradictory. It both describes the Project Coordination Team as a means for the Corps and DNR to oversee the project and provides the team only a role of providing comments and recommendations to the CWP "for their consideration." This provision implies that the CWP may ignore recommendations of the Project Coordination Team. Any provision that allows the CWP to act without oversight appears unacceptable. In the last paragraph, the ability of CWP to reject recommendations of technical committees may be appropriate, but the Corps, alone or through the Project Coordination Team must retain authority over project implementation.	The Corps will retain oversight authority and final approval over project implementation. This will be made clear in the final FR/EIS.	Mit-Responsibility
460	7.6 pp. 83-84 - Agency oversight - The Corps and CDNR roles and authorities appear inappropriately limited to review and comment on annual reports produced by the CWP. In addition, the Corps has say over determining when the CMP success criteria have been met. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.	Comment noted. The Corps will retain oversight authority and final approval over project implementation. This will be made clear in the final FR/EIS.	Mit-Responsibility

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460	7.6, pp. 84-85 - The role of the USFWS regarding Preble's and any other listed species under ESA includes oversight of Corps' adherence to terms and conditions of any biological opinion issued. The Corps in turn must retain authority over project implementation. In this context, both the USFWS and Corps will have roles in overseeing mitigation plans regarding the Preble's and subsequent changes to plans.	Comment noted. This will be made clear in the final FR/EIS.	Mit-Responsibility
285	The PPA should be reviewed by all the federal and state resource and regulatory agencies.	The feasibility report and environmental impact statement were prepared in compliance with NEPA. The WSA will be drafted and reviewed by the Corps and state of Colorado in compliance with regulations and guidance.	Mit-Responsibility
460	Executive Summary, p. 4. - There is an error at the top of the page. The project coordination team would include CDNR, but not the USFWS.	Comment noted and correction will be made.	Mit-Responsibility
285, 446, 529, 537, 554	The CMP states that the water providers will form the "Chatfield Reservoir Mitigation Company, which would have exclusive control of the implementation activities" (App. K, p. 69). The company would be aided by several advisory committees, whose comments and recommendations it only has to "consider" (water providers have exclusive responsibility for implementation). Adoption of the recommendations should be mandatory unless the Corps (which has ultimate responsibility) decides they are unreasonable. This is specifically critical to a plan that relies on adaptive management. Also, does the Corps have plans to devote sufficient time to oversight? If so, Chapter 7 of the DEIS states that "all costs are 100% non-federal" and it does not take into account these Corps responsibilities and the costs that accompany them. It is unclear how this company will be established and the financial assurances that needs to be in place to assure compliance with the mitigation requirements. Any mitigation company formed should have the resources and liability for the completion of the project. Who will pay if the water providers run out of money? Who will oversee this project? Who keeps the promises of future maintenance? Who is all involved in oversight?	The Technical Advisory Committee, as its name implies, provides advice and recommendations. All recommendations will be fully considered, and in most instances the recommendations will likely be implemented. However the Corps, CWCB and Water Providers need the flexibility to work with all parties and their recommendations to select what needs to be implemented with the Corps having the responsibility for making the final decision. All costs will be paid by the non - federal sponsor in accordance with the 1958 Water Supply Act.	Mit-Responsibility
529	If the reallocation is approved there must be enforceable provisions for additional funding, should it be necessary to fulfill mitigation	The mitigation obligations from the project will be described in the record of decision and enforced by the Corps of Engineers.	Mit-Responsibility

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	requirements (CEQ Memorandum for Heads of Federal Departments and Agencies, Jan. 14, 2011, p. 9).		
529	Public involvement is a key procedural requirement of the NEPA review process and should be fully provided for in the development of mitigation and monitoring procedures. Agencies are also encouraged…to consider including public involvement components in their mitigation monitoring programs." The DEIS and CMP need to include a clear statement of public involvement in the mitigation monitoring of the Chatfield Reallocation project.	Sections 7.3 and 7.6 of the CMP present the roles and responsibilities of the agencies and the interested public for providing review and input for implementation of the compensatory mitigation plan. The CMP call for the establishment of a Technical Advisory Committee (TAC) that would include representation from the Audubon Society of Greater Denver and other environmental organizations. The roles and responsibilities of the TAC are presented in Section 7.3 of the CMP.	Mit-Responsibility
537	Because so much mitigation hinges on Adaptive Management, the Corps must clearly explain what will happen if this escrow account becomes exhausted before all mitigation needs have been addressed.	The Chatfield Water Providers will be contractually responsible for the full implementation and funding of the required mitigation. As described in Section 7.2.1 of the CMP (Appendix K of the Draft FR/EIS), the Chatfield Water Providers will establish an environmental mitigation escrow fund that will be at least equal to the estimated cost of fully implementing and completing the CMP including a reasonable contingency.	Mit-Responsibility
537	Pages 4-58 states "a step-wise" approach would be to allow "maximum water levels to be achieved only after mitigation for partial inundation was achieved or at least underway." However, actually fully implementing the mitigation measures first is highly recommended to ensure they accomplish their intended purpose. The term "underway" is too general and unacceptable because it could be misconstrued as having satisfied a mitigation requirement even if the measures have just begun to be implemented or planned.	As described in Section 7.2.1 of the CMP (Appendix K of the Draft FR/EIS), the Chatfield Water Providers will establish an environmental mitigation escrow fund that will be at least equal to the estimated cost of fully implementing and completing the CMP including a reasonable contingency. The CMP also establishes a schedule for meeting the mitigation requirements. Failure to meet the mitigation schedule will result in a proportional use of the reallocated storage defined by the mitigation accomplished and the schedule defined in the CMP. The CMP schedules address both implementation and meeting the specified success criteria. This approach provides funding upfront and incentives for the mitigation to be successfully completed.	Mit-Responsibility
570	We request that the language in the EIS be revised to include information regarding proposed contractual relationships between the CDNR, Water Providers, and the Corps, or, if the specifics have yet to be agreed upon, to recognize that flexibility exists in how these contractual relationships will ultimately be structured. (See Draft FR/EIS, pages ES-13; 5-33 to 5-35; 5-46 to 5-47; 7-2; Compensatory Mitigation Plan, pages 54-55; 67-69; Figure 24).	Section 5.5.10 of the FR/EIS and Section 7 of the Compensatory Mitigation Plan, Appendix K, of the FR/EIS, are two places where the proposed contractual relationships of the parties are discussed and convey that flexibility exists in those relationships until the contracts are finalized.	Mit-Responsibility

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417, 663	Designation of 23 acres of on-site and off-site recruitment of new cottonwood growth to replace 200 acres of cottonwood and wetland vegetation is almost useless; it takes decades to establish cottonwoods, assuming you are successful, yet the DEIS states that compensatory mitigation should be complete in about 6 years. Restoring wetlands requires that there is an existing hydrologic regime to support wetland vegetation. Engineering such hydrology fails as often as not.	The comment confuses some of the compensatory mitigation objectives. The draft Compensatory Mitigation Plan (CMP, Appendix K of the draft FR/EIS) calls for the following to compensate for the estimated loss of up to 42.5 acres of mature cottonwoods: (1) protect up to 22.5 acres of mature cottonwood woodlands within the defined off-site bird habitat complex near Chatfield State Park and (2) create up to 13 acres of specifically-designated cottonwood recruitment areas on-site and up to 10 acres off-site that will contribute toward the total compensatory mitigation goal of providing up to 796 EFUs (Section 5.0 of the draft CMP). The compensatory mitigation for mature cottonwoods involves the creation and protection of about 45 acres of cottonwoods. The 6 years is for implementation of the mitigation. The draft CMP and FR/EIS do not state that the newly established cottonwoods would be a mature resource in 6 years. This is in part why the proposed mitigation includes the protection of mature cottonwood woodlands.	Mit-Riparian
460	6.1.1, p. 23 - Based on information provided in an August 29, 2012, interagency meeting and site visit at Chatfield Reservoir, one of the three primary habitat conservation activities proposed for onsite mitigation in Appendix K, installation of sheet pile cutoff structures to raise the ground water table, is no longer planned. A second activity, creations of secondary channels, ditches, and backwaters to bring surface water to mitigation areas, has been modified to largely exploit water from lakes, and both water availability and soil permeability at potential mitigation sites is yet to be tested. These changes exemplify the preliminary nature of the CMP and the need for much more certainty regarding details prior to the Final FR/EIS.	As described in the CMP, mitigation planning will continue through the FR/EIS process as more information becomes available and greater detail and specificity can be added to mitigation plans. The CMP will be revised and updated with the most recent plans for mitigation and included as part of the final FR/EIS.	Mit-Riparian
537, 660	Colorado Natural Heritage Program has rated the Chatfield cottonwood riparian woodlands as "globally critical/globally imperiled and state imperiled."	In response to the U.S. Fish and Wildlife Service's Planning Aid Letter, Corps engineers investigated trying to save the mature cottonwood forest along the South Platte River by constructing permanent berms and using pumps, but the pumps would have needed to be operated 24 hours per day and would have been noisy, disturbing any wildlife in the cottonwood forest; therefore, additional areas of mature cottonwood forest and new cottonwood plantings (which would become mature as the existing mature trees aged and died) were included in the compensatory mitigation plan.	Mit-Riparian

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529, 537	Mature cottonwood forests are unique habitats along the front range. What is the definition of “mature” cottonwoods? Some cottonwoods at Chatfield are close to 100 years old and pre-date the dam, others are 40 years old and have grown in since the dam. Both provide valuable recreation and wildlife benefits. The differentiation of “mature cottonwoods” from the forest they are part of is an artificial construct; mitigation should not focus on replacing individual trees but on preserving/replacing the whole forest habitat that includes both mature trees and younger ones. Management of remaining forests should focus on regeneration and protection.	The mature cottonwood stands were singled out in the draft FR/EIS because this resource was identified by agencies and environmental groups as a resource of special concern. It was determined early on in the FR/EIS process that the mature cottonwoods would not be mixed with a more general cottonwood mapping unit. The mature cottonwood unit is comprised of cottonwoods that were estimated to pre-date the construction of Chatfield Reservoir. Mitigation will include management of the remaining existing cottonwood forest as has occurred in the past. For the calculations in the main FR/EIS "mature" trees were based on size rather than age and were considered mature if they have a diameter at breast height (dbh) of at least 20 inches. The large cottonwoods are given specific attention in the CMP (p. 21) since this was identified as an important habitat type at Chatfield. Although the CMP includes a component focused on mature cottonwoods, mitigation for these cottonwoods will include areas designated for recruitment of new cottonwood growth, and these areas will contribute to the long-term persistence of multi-aged patches of cottonwoods (CMP, p.21). In addition, the mitigation of wooded habitats for birds and Preble's, both on-site and off-site, will also provide benefits to other wildlife using those habitat types. As further stated in the CMP (p. 2), "Although the CMP focuses its mitigation activities on the target environmental resources, it is structured to provide a diversity of ecological functions that will benefit a broad range of wildlife including insects, amphibians, reptiles and mammals."	Mit-Riparian
529, 605, 676	Mitigation for mature cottonwood forest is absolutely inadequate: 13 acres on site for “recruitment of new cottonwood growth,” protecting up to 22.5 acres of existing mature cottonwood habitat off site, and designating up to 10 acres of off-site mitigation lands for recruitment. In the first place this clearly represents a net loss of this habitat type; protection of existing mature cottonwood forest does not replace or alleviate lost forest. Only if the acquired habitat is very valuable and in imminent danger of being lost, and/or important for sustaining T & E species can protect existing habitat be regarded as anything but a net loss. Second, trading acres of standing mature trees for acres of “recruitment” does not come close to replacing or	The draft Compensatory Mitigation Plan (CMP, Appendix K of the draft FR/EIS) calls for the following to compensate for the estimated loss of up to 42.5 acres of mature cottonwoods: (1) protect up to 22.5 acres of mature cottonwood woodlands within the defined off-site bird habitat complex near Chatfield State Park and (2) create up to 13 acres of specifically designated cottonwood recruitment areas on-site and up to 10 acres off-site that will contribute toward the total compensatory mitigation goal of providing up to 796 EFUs (Section 5.0 of the draft CMP). The compensatory mitigation for mature cottonwoods involves the creation and protection of about 45 acres of cottonwoods. The draft CMP and draft FR/EIS anticipate that the	Mit-Riparian

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	recreating the ecological functions of the irreplaceable old growth forest. Third, the labeling of mitigation areas planned for “cottonwood regeneration” (SPR 2,3 and 5) does not tell us if this is mitigation for the old growth cottonwood groves or for other, younger groves lost to inundation. Fourth, the ecological values of scattered, regenerating parcels are not equal to those of a contiguous forested area due to edge effect and penetration of external influences into the small parcels.Offsite mitigation should require as much as a 10:1 ratio of mitigated lands to impacted lands, as the Corps has sometimes required when using protection of existing habitat to mitigate for wetland losses under the Clean Water Act. The U.S. Fish and Wildlife Service recommends at least 2:1 for important migratory bird habitat (Planning Aid Letter, Feb. 2006). We agree. - The riparian habitat at Chatfield will be strung out into much smaller areas over a length of many miles under the proposed mitigation plan. Will large flocks of migrating birds be able to use the strung-out smaller areas to the same extent as the large concentrated area of habitat that currently exists at Chatfield? I could not find an answer in the DEIS. However, the DEIS does acknowledge that the greatest adverse impact is to migratory birds (Draft EIS page 4-84). While the DEIS claims that the EFU's lost will be replaced by a like number of EFU's, there does not appear to be any study of or guarantee that the migratory birds will be able to actually use the replacement habitat to the same extent they now use Chatfield.	established cottonwoods will take years to mature. This is in part why the proposed mitigation includes the protection of mature cottonwood woodlands. The mitigation plan takes a functional approach as opposed to a ratio approach. The existing mature cottonwoods that will be protected occur on private lands near Chatfield State Park and occur in Preble's designated critical habitat. The protection of the mature cottonwoods are important of sustaining a T&E species.	
285, 509, 537	The document states that because it is unknown where the water level will be on an annual or seasonal basis, there is substantial uncertainty in this project. Substantial uncertainty should translate into additional measures to assure that the proposed actions are successfully completed.	Substantial uncertainty with regard to the water level fluctuations is handled via a worst case analysis. The worst case at a minimum ensures that sufficient mitigation is provided for impacts that would occur under the worst condition. In the case that less impacts might be realized in implementation, sufficient mitigation will have been identified. Uncertanties are addressed in the adaptive management Plan which has been added to the final FR/EIS.	Mit-Risk
285, 502	Streams provide additional recreational and ecological functions related to geomorphology, hydrology, habitat unique to stream dependent wildlife, and water quality that are not mentioned or mitigated in the FR/DEIS. The DEIA does not show any compensation for the 0.7 miles of the South Platte River, all of Deer	Mitigation for the riparian habitats that formed around those streams is accounted for. The inundation will only create a lentic system in certain years when storage is being held. The proponents look to provide stream restoration work in addition to the riparian mitigation above and beyond required mitigation.	Mit-Stream

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	Creek in the park, and the multiple channels of Plum Creek are inundated and converted from a lotic system to a lentic system with the accompanying change in ecological values and functions. They should require mitigation.		
576	In the CMP, we suggest including mitigation measures (to be developed in coordination with CDOW) to fund stream habitat improvements in the South Platte River upstream and downstream from Chatfield Reservoir (page 4-56).	The Adaptive Management Plan addresses fisheries and aquatic habitat. A Project Coordination Team will be established and include the COE and CDNR. Technical Advisory Committees can be established by the Project Coordination Team, Colorado Division of Parks and Wildlife is identified to tentatively be represented on this committee. The Chatfield Water Providers and the State are currently in discussion which include negotiations regarding aquatic habitat improvements for portions of the South Platte River upstream and/or downstream on Chatfield Reservoir. These agreed to habitat enhancements would occur outside of the federally recommended plan.	Mit-Stream
628	We believe that inundation of the upstream reach, even intermittently, will almost certainly result in permanent changes negatively impacting stream fishing recreation in this area on Chatfield State Park. This section of the river provides important river fishing opportunities for trout within the park. The fluctuation in reservoir elevations under Alternatives 3 and 4 will negatively impact the riverine habitat, deposit sediments on the river gravels and may lead to a loss over time of trout habitat in this section of the river.	Riverine segments associated with the reservoir are recognized in the EIS to have been influenced by the reservoir, and will be inundated more frequently under a reallocation. While these segments will flow when the reservoir is not filled, the character of the habitats will have changed to aquatic taxa more tolerant of a larger range of temperature, flow, and dissolved oxygen concentrations, such as those species that currently exist in the reservoir setting. Riverine wetlands associated with the inundated flowing sections of river will be mitigated on and off site. While benefits are focused on Preble's, birds, and wetlands, there are likely to be improvements to streams associated with the mitigation sites. In addition, the water users plan to do stream restoration mitigation activities for 0.5 miles on the South Platte River downstream of Chatfield and for 0.7 miles upstream of the 5444 foot water level mark on the South Platte River upstream of Chatfield. Also, after a review of other reservoirs in the region, it appears that some with reservoir pools that fluctuate to a greater degree than the selected alternative, indicate that mud flats are unlikely to be an issue with the expanded fluctuation zone for the selected plan. Substrates of sands and pea gravels and cobbles that are associated with the South Platte River where it flows into the	Mit-Stream

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		reservoir is not expected to change due to inundation. This would be especially true when water levels are low, and stream flow is present in the channel. This information will be included in the final FR/EIS.	
460	Figures 3-15 and 3-16, pp. 3-79 and 3-81 - CPW mapping of Preble's occupied range depicts only areas where jumping mice have been captured (as of 2007) and nearby riparian habitats. It does not include stream segments where proximity to known Preble's occurrence and continuity of habitat suggest that occupancy is likely. This limits the utility of these figures, which may erroneously be interpreted to depict areas where the Preble's is absent. Substituting or overlaying Douglas County riparian habitat mapping produced in conjunction with the Douglas County Preble's Habitat Conservation Plan would better depict the likely occurrence of the Preble's. Designated critical habit for the Preble's might also be included in these figures.	Figures 3-15 and 3-16 will be revised to include Douglas County's "Riparian Conservation Zone" and the U.S Fish and Wildlife Service's designated critical habitat for Preble's.	Mit-T&E
460,	4.9.3, p. 4-95 - The fifth paragraph references only impact to Preble's critical habitat along the South Platte River, not along Plum Creek. Since much of the document may have been drafted prior to USFWS's 2010 revised designation of critical habitat that included Plum Creek, all references to critical habitat should be checked to include that update.	The text has been checked and the sentence mentioned in the comment (page 4-95) as well as a sentence on page 4-101 need to be revised to include reference to the critical habitat along Plum Creek. The sentence in the fifth paragraph on page 4-95 will be revised to read, "In conclusion, a change in the target pool elevation to 5,444 feet msl would adversely affect the Preble's mouse habitat within the study area and affect critical habitat along the South Platte River and Plum Creek." The sentence in the sixth paragraph on page 4-101 will be revised to read, "In conclusion, a change in the pool elevation at Chatfield Reservoir to 5,437 feet msl is likely to adversely affect the Preble's mouse within the study area and affect critical habitat along the South Platte River and Plum Creek."	Mit-T&E
460	5.5.8.2, p. 5-30 - The third paragraph cites the Biological Assessment's (Appendix V) conclusion that the proposed action is likely to adversely affect the Preble's and to "adversely modify" its designated critical habitat. Both here and in Appendix V the correct statement should read "…and "adversely affect" its designated critical habitat." Whether the proposed alternative is likely to destroy or adversely modify designated critical habitat will be determined by the USFWS in the biological opinion.	The sentence cited in the comment (p. 5-30, Section 5.5.8.2, third paragraph) will be revised with the language indicated in the comment. The revised sentence in the FR/EIS will read, "The BA concluded that the Proposed Action is likely to adversely affect the Preble's mouse and adversely affect its designated critical habitat." The statements in Sections 5.2.10 and 6.10 of the Biological Assessment will also be revised as instructed in the comment.	Mit-T&E

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460	1.0, p. 7 - There is an error in the first full paragraph, which states, “EFUs were not used for off-site mitigation of impacts to designated Preble’s critical habitat.” They are being proposed for that use and this statement is contradicted later on the page.	This mistake will be fixed in the final CMP. It is a holdover from when Preble's critical habitat designation was limited to the Upper South Platte Critical Habitat Unit.	Mit-T&E
460	3.1, p. 11 - Here and elsewhere the document states that USFWS policy requires that impacts to designated critical habitat must be mitigated within the same critical habitat unit. A citation (USFWS, 2004) is to a draft memorandum on application of the “destruction or adverse modification” standard, and not a policy on mitigation. More accurately, in accordance with the memorandum, USFWS considers only mitigation actions within the same critical habitat unit when determining whether an action will result in destruction or adverse modification of critical habitat.	The final CMP will be revised using the recommended language from FWS.	Mit-T&E
460	4.2, p. C-17 - In the first paragraph, future delisting of the Preble’s does not mean its habitat would likely be increasingly lost. A recovery plan would likely link a mechanism for long-term protection of important habitat to any delisting action.	Acknowledged. Clarifying text added.	Mit-T&E
509	There is evidence that Sugar Creek is already a mitigation site – which suggests an attempt to double-count these lands as one mitigation site.	The Corps has coordinated with the USFS regarding the mitigation of impacts to Preble's designated critical habitat that will be located on lands within the Pike National Forest. The lands included for mitigation are not presently a mitigation site and have not been proposed as a mitigation site. There has been no "double counting" of mitigation.	Mit-T&E
417, 529	Offsite mitigation for Preble’s mouse habitat will consist of redesign, road and drainage improvement of Douglas CR 67, currently a dirt road adjacent to Sugar Creek. The factors that have contributed sediments that have severely degraded Sugar Creek’s aquatic and riparian habitats are “routine road maintenance” and “road location and design.” The Forest Service has been negligent in correcting the degradation of Sugar Creek. These are actions by other parties than the providers and should be the responsibility of Douglas County. Should the providers receive mitigation credit for correcting the actions of others on lands not owned by them or by the Corps?	As stated in Section 6.3.2 of the CMP, there is no funding in place (either USFS or Douglas County) to comprehensively implement the Sugar Creek Sediment Mitigation Project. If not for funding by the Chatfield Water Providers, the Sugar Creek Sediment Mitigation Project would not be implemented. This has been verified with both Douglas County and the USFS.	Mit-T&E
529	Colorado State Parks and the Colorado Natural Areas Program “Stewardship Prescription” provides information to “1. Manage selected park lands to protect, preserve and enhance habitat	The CMP focuses on providing suitable mitigation for impacts to Preble's habitat and does not distinguish between agencies and their respective management roles for Preble's habitat at Chatfield	Mit-T&E

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	suitable for Preble's…" (CSP and CNAP, 12/2/99). Obviously these two state agencies are assuming responsibilities for managing mouse habitat in state parks. The reallocation would destroy some lands bordering the South Platte River that have been enhanced for Preble's - this is contrary to the goals of the two agencies. Does the CMP take into account these state responsibilities for this enhancement and require extra mitigation for such losses?	State Park. CPW has reviewed the CMP and has not adversely commented on the proposed mitigation for impacts to Preble's habitat relative to their management roles for Preble's habitat.	
569	The reallocation impacts more critical habitat than any other plan, and the CMP relies too heavily on off-site mitigation and that the Chatfield Reservoir Storage Reallocation will not protect critical habitat nor will it promote the recovery of the Preble's meadow jumping mouse.	Comment noted. The Corps and FWS are consulting under Section 7 of the ESA regarding impacts to T&E species and mitigation of Critical Habitat.	Mit-T&E
605	Unlike the Preble's mouse, South Metro Denver is not critical habitat for humans. Destroying critical habitat for the Preble's, with known residents with a mitigation plan to develop colonies in Sugar Creek, where they are rare and the area is already being mitigated from other environmental damage. This appears to be a case of consultants telling clients what they want to hear. The scientific case isn't compelling that this can be accomplished. Since it is uncertain, why not have the Water Providers begin the mitigation process immediately, and make developing a new and sustainable colony of Preble's mice a pre-condition for approval?	The Corps and FWS are consulting under Section 7 of the ESA regarding impacts to T&E species. The Corps prepared a draft Biological Assessment (BA) which was included in the draft FR/EIS (Appendix V). Regarding the timing of mitigation, the Corps will require mitigation to be accomplished concurrent with reallocation. Milestones have been established to ensure mitigation is met prior to water providers being able to fully use the reallocated storage.	Mit-T&E
3, 439, 529, 676	The report states that Alternative 3 would adversely impact terrestrial wildlife, including upland or grassland wildlife, some raptors, large mammals, songbirds, herons, shrub wildlife and waterfowl. What will be done about this if anything? I can't find any solution to this problem or is this just a given that we will have to accept this destruction? On-site mitigation for wetlands loss involves converting upland areas to new wetlands. Combined with other actions such as excavation of fill material (borrow pits), the result is a loss of 222 acres of upland grassland habitat (Table 4-13). Grassland birds face declining population trends more than any other group of species (National Audubon Society, State of the Birds USA, 2004). While riparian and wetland habitats are rarer than grasslands, the latter habitat type should not be eliminated without	As described in the CMP, the borrow areas will be revegetated with native grasses and will provide upland habitat for birds. Additionally, protected off-site mitigation lands and their buffers will provide upland grassland habitat.	Mit-Uplands

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	any kind of mitigation, as they are important in themselves and critical to the biodiversity of the park. Enhancement of remaining upland habitat is one option. Certainly the 15.6 acres of native grasslands lost (Table 4-10) should be replaced, perhaps in the revegetation of the borrow areas. The NRCS has commented that a decrease in upland habitat will likely cause significant impacts to the wildlife species currently using the site (Appendix S). The DEIS needs to address the loss of grassland/upland habitat and how losses will be mitigated.		
460	Figure 4-10, p. 4-62 - Most grassland at Chatfield Reservoir is dominated by introduced species and of relatively low resources value. The projected loss of 15.6 acres of native perennial grassland should be mitigated, and could be, through conversion a similar acreage of non-native grassland to native grassland.	As stated in Appendix F of the CMP, borrow areas will be seeded with native grass species which will help to mitigate the loss of native upland grasslands. Additionally, the buffers associated with the off-site mitigation and protection and management of these properties will in some instances involve native grasslands.	Mit-Uplands
460	6.1.1.2, p. 27 and 6.2.1.1, pp. 34-35 - Success criteria for mitigation sites should be refined. Specific criteria should be developed for accepting “volunteer” plants and “vegetative reproduction” instead of planted trees and shrubs. Criteria for allowable percentage of state A-List noxious weeds on mitigation sites should be zero percent, as generally required by the Corps’ Littleton Regulatory Office on wetland permits they issue.	The CMP will be revised to include success criteria for volunteer plants and vegetative reproduction. The success criteria for all A-List noxious weeds will be eradication.	Mit-Weeds
460	6.1.3, p. 31 - The second full paragraph refers to potential mitigation credit for weed control at Chatfield Reservoir. Weed control is part of the success criteria and no credit should be given for weed control on mitigation sites at Chatfield Reservoir.	The CMP will be revised so that credit is not given for weed control for on-site mitigation sites that involve ground disturbing activities which could induce colonization of the sites by weeds which will be controlled as part of site management.	Mit-Weeds
526	Spread of water-sucking invasive phreatophytes such as tamarisk (due to reallocation) may contribute to water loss more than evaporation.	There is little evidence that reallocation will increase the presence and distribution of phreatophytes. If tamarisk does invade the fluctuation zone, it will be controlled.	Mit-Weeds
529	The impacts of Alternative 3 do not mention possible water pollution by herbicides if/when weed control is done. This should be included.	Weed control is currently performed by CPW as part of its management of the Chatfield State Park and weed control will continue with or without implementation of the Selected Plan. Weed control would continue as part of park management with the Selected Plan and the method of control (biological, mechanical, chemical or cultural) would be appropriate for the weed species in need of control and the location of the weeds. As is the current management practice, all applications of herbicides will follow	Mit-Weeds

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		guidelines from the manufacturer, EPA and the state. Herbicides used within the fluctuation zone would be limited to herbicides approved for use in the vicinity of aquatic environments. Monitoring of the fluctuation zone for the presence of weeds will occur as will implementation of control measures as described in the Adaptive Management Plan. Monitoring of Chatfield Reservoir water quality associated with the current use of herbicides for weed control is not done and such monitoring is not proposed for the future (with or without reallocation).	
537, 628	To mitigate the effects of the mudflats, an agreed upon noxious weed program should also be required as a condition of the Corps' approval of the reallocation and remain in place for the life of the project. Cocklebur should be included on the list of weeds. Based upon experience at Glendo and other reservoirs with greatly fluctuating levels, invasion of cockleburs and Canada thistle can become very problematic.	The potential for weeds to invade the fluctuation zone of Chatfield will need to be monitored and if weeds do invade, controlled. A review of other reservoirs in the metro area (see COMPARATIVE REVIEW OF RESERVOIR FLUCTUATION ZONE - CHATFIELD REALLOCATION PROJECT report) indicated that they do not appear to have substantial weed issues within their fluctuation zones, although some reservoirs in southeast Colorado do have weed problems within the fluctuation zone. Noted as one of the more common weeds was cockleburs. Weed control will continue with or without implementation of the Selected Plan by CDPW, and the method of control (biological, mechanical, chemical or cultural) would be appropriate for the weed species in need of control and the location of the weeds. An adaptive management plan has been prepared for the final FR/EIS that provides greater detail and specificity regarding the role of adaptive management. The plan provides a framework for addressing the uncertainties associated with impact estimates and proposed mitigation for the resources of concern, and also includes resource-specific monitoring and management actions, including discussion on weed control.	Mit-Weeds
322	I understand that there are numerous errors in the environmental impact statement. Not a tree should fall if, in retrospect, an error will be identified. Could this happen?	All comments received on the draft EIS have been considered, and changes/corrections have been made where appropriate.	NEPA
226, 227	When is the next public meeting planned to address questions raised by the city of Littleton and its residents?	Public meetings were held June 25, 26 and 26, 2012. Comments submitted from the City of Littleton, as well as all others received will be reviewed, evaluated and responded to. The Draft FR/EIS will be revised accordingly and a Draft Final FR/EIS will be prepared. The Final FR/EIS will be available for viewing. A notice will be in the	NEPA

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		Federal Register announcing the release of the Final FR/EIS.	
349, 671	I regularly see many low income, minority families and children, as well as disabled people, enjoying park amenities that will be lost or not fully mitigated including camping areas, trails, and wooded areas. The environmental justice impacts of the proposed project also have not been adequately characterized or mitigated in contravention of Executive Order No. 12898.	All Americans deserve to be protected from environmental affects, and all deserve clean air, pure water, lands that are safe to live on, and food that is safe to eat -- not just those who can afford to live in the cleanest, safest communities. As such, the executive order was established to avoid disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. Chatfield does not create human health or environmental health type issues to anyone. With regard to recreation (which is not necessarily an emphasis of the EO), the Chatfield project does not disproportionately affect minority and low income communities, as all manner of people from the Denver area utilize Chatfield. In addition, affects to recreation are being dealt with in a manner to avoid any conversion of recreational use, and to create as like of a recreational experience as possible. Design and development of replaced facilities would be completed under current building codes, Colorado State Parks building requirements, and to meet Americans with Disabilities Act (ADA) requirements for public facilities.	NEPA
493	We are troubled by the Corps' 404(b)(1) analysis in the DEIS. Omitting the majority of the wetlands and the aquatic ecosystem impacts of Chatfield Reallocation from the analysis sets a potentially dangerous precedent that could undermine the environmental conservation mandate of Section 404 of the Clean Water Act. Instead, the Corps should compare meeting Front Range water needs with several small-scale and less impactful projects – including Chatfield Reallocation – against the impacts of large-scale water imports from other river basins.	The 404(b)(1) Guidelines are the substantive criteria used to evaluate discharges of dredge or fill material into waters of the U.S. under Section 404 of the CWA. The reallocation of storage in Chatfield Reservoir (the Corps' action and subject of the FR/EIS) will not involve the discharge of dredge or fill material into Chatfield Reservoir. The action involves the Corps making a determination that the reallocation of storage is feasible and economically justified. The two federal agencies with jurisdictional authorities under the Clean Water Act – EPA and the Corps – coordinated extensively on the 404(b)(1) analysis applicable to this civil works project (see Appendix S, p. S-2 and Attachment 1). The scope of the draft 404(b)(1) analysis in the Draft FR/EIS is consistent with the determinations of both agencies charged with implementing the CWA. Appendix W of the Draft FR/EIS addresses how activities that involve a discharge of dredged or fill material into a water of the U.S. comply with the guidelines. The Chatfield 404(b)(1) analysis (Draft FR/EIS Appendix W) evaluates the impacts of and alternatives to	NEPA

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		the proposed discharges of dredged and fill material into waters within the scope of the Corps' 404 regulatory jurisdiction. As recognized in the DEIS (Section 5.5.8; Appendix W), the relocation of certain recreation facilities and implementation of certain environmental mitigation activities, as proposed, would involve a 404-regulated discharge. These 404-related discharge activities would involve an estimated temporary impact to about 5.5 acres of wetlands and a loss of about 6.9 acres of wetlands. An analysis pursuant to the criteria in the 404(b)(1) Guidelines was conducted to evaluate practicable alternatives to these proposed discharges. The analysis also considers the potential direct, indirect, and cumulative effects of the proposed discharges on the physical and chemical characteristics of the aquatic ecosystem, on biological characteristics of the aquatic ecosystem, on special aquatic sites, and on human use characteristics pursuant to the criteria and required factual determinations, evaluations, and tests in the 404(b)(1) Guidelines.	
660	Colorado Parks & Wildlife has listed 15 anticipated recreational impacts and 9 anticipated fish and wildlife impacts, all of them negative.	CPW has been and continues to be coordinated with in this planning effort.	NEPA
509, 526, 529, 537, 605	Alternative 1, the "no action" alternative does not consider the two distinct interpretations of a "no action" that must be considered (per NEPA). Also, per NEPA, it does not provide for a meaningful "baseline" against which other alternatives are measured; nor can building Penley Dam be considered a "predictable" action alternative in its stead. According to the July 29, 2011, *Denver Post*, developers scrubbed the Penley Reservoir project roughly a year before the DEIS was issued. The only viable No Action Alternative is to have Chatfield Reservoir remain as it is currently operated, and the water providers doing what they currently do.	NEPA requires the scope of alternatives to the proposed action include the no action alternative, and other reasonable courses of action (including mitigation measures). Because the proposed action is a specific project (reallocation at Chatfield), it is logical and appropriate to identify another alternative(s) that would be likely to proceed in order to meet the purpose and need of identified in the DEIS. Penley and gravel pits reasonably represent the types of actions that the water providers would take if reallocation did not occur. The Penley project provides an appropriately developed alternative from which to make reasonable comparisons between the proposed action and alternatives. Although it is true that Douglas County Planning Commission rejected a proposal for the Penley Reservoir recently, that does not mean that the alternative does not provide a reasonable representation of a reservoir that might be constructed in the future. It is very clear that surface storage is the direction that water providers would proceed with, as groundwater is non-renewable, and a resource that water providers do not want to	NEPA

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		be reliant on. There is no reason to consider a "do nothing" alternative (the other "no action" definition) in an analysis that includes implementing a project.	
529, 537	The Corps has not taken the required "hard look" as NEPA requires. We (Audubon) must express frustration that the Corps has shown a lack of receptivity to comments made by environmental, non-governmental organizations as well as the state of Colorado. A lack of receptivity or concern to comments by those entities is evidence that the Corps is simply doing the DEIS to rationalize the decision it has already made. For example 1) the Corps has refused to provide visual representations of impacts; 2) it has refused to consider alternatives such as increased water conservation, use of alternative existing infrastructure, or storage in other existing reservoirs; 3) it disregarded information on bird species provided by a number of knowledgeable groups; 4) it has failed to respond to concerns expressed by Colorado Department of Natural Resources and State Parks to maintain the quality of the recreational experience at Chatfield State Park (Winstanley, ibid); 5) the Corps has made numerous policy exceptions to even make the Chatfield Reallocation feasible (reduction in costs of storage, waiver of the requirement to build facilities above the 10-year flood pool, and lack of conformance with its own policies regarding 404 (b)(1) guidelines).	The Corps has taken an appropriately detailed look at possible environmental consequences of the proposed action in the FR/DEIS. Scoping was conducted at the beginning of the process to help determine the scope of the main issues to be addressed in the FR/DEIS. To foster an open and honest process, as well as to help ensure appropriate scope of analysis, a number of entities were invited to participate in the Chatfield Reservoir storage reallocation study as Cooperating Agencies and Special Technical Advisors. These include selected federal, state, and local government entities, the project participants (i.e., water providers), and several environmental groups. The Cooperating Agencies and Special Technical Advisors were given the opportunity to participate in project meetings and review and comment on the Preliminary Draft chapters of the FR/DEIS, as well as help in developing evaluation criteria, analyzing impacts, developing mitigation strategies, etc. The FR/EIS has also undergone a chapter-by-chapter Internal Technical Review (ITR) by Omaha District staff (in addition to Cooperative Agencies, and Special Technical Advisors), an Agency Technical Review (ATR) performed by Corps of Engineers districts outside of the Omaha District, and an Independent External Peer Review (IEPR). In addition, the modeling performed by the Corps to quantify impacts to ecological resources, and develop ecologically based mitigation was evaluated by independent experts as part of the Corps' formal model review process.	NEPA
529	The Executive Summary should include more information. The summary is to provide, within its own pages, a summary of the major impacts. It must be rewritten to capture affects such as cottonwood forest loss, wetlands loss, firm/safe yield, etc.	The Executive Summary discusses the alternatives considered, comparison of alternatives, trade off analysis, key risk and uncertainties and a discussion of the tentatively recommended plan. Reference is made to sections in the report where additional information can be found in detail.	NEPA
529	The Corps cannot eliminate reasonable alternatives simply because they require action by entities outside itself (Morton, 458 F. 2nd at 836). Thus the Corps violated NEPA when it eliminated the Rueter-	Any water concept that is not available for use simply cannot be considered for detailed evaluation. Many concepts identified in the initial screening of water supply concepts were determined to have	NEPA

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	Hess, South Platte, McLellan and Platte Canyon Reservoirs due to the owners having “no plans” to make it available.	been already planned or allocated for use in other regional water supply strategies.	
529, 537	The Corps incorrectly tries to segment the Chatfield Reallocation plan. Segmentation is an attempt to avoid environmental regulation by dividing one project into smaller projects and not analyzing the impacts of the project as a whole. The 404(b) 1 analysis does not consider the affect of the entirety of the project. Rather, it only looks at the dredge and fill aspects, and ignores the other associated impacts.	The Corps has evaluated the affects of all aspects of the reallocation in the EIS, and has not segmented portions of the project for purpose of justifying numerous segments individually.	NEPA
529, 554	Cumulative effects are insufficient. While this section mentions some projects/activities that may have a cumulative impact, there was no attempt to quantify the impacts. For example, the Denver Water projects – Chatfield Reservoir Drought Drawdown, Last Chance Water Diversion to Conduit 20 at Kassler, and the Denver Water Temporary Chatfield Pump Station – could have a significant impact on Chatfield Reservoir water levels.	The CEQ section quoted in this comment refers to connected actions. The Corps assumes that the comment intended to refer to CEQ Regulation 1508.25(a)(2), which defines cumulative actions. As discussed in Chapter 4, Section 4.19.3, quantitative impacts for most of the projects are unavailable; however, the information that is available for the respective projects is described in that section. "Determining the Response of the Resource to Environmental Change," CEQ's Considering Cumulative Effects Under the National Environmental Policy Act (available at http://ceq.hss.doe.gov/nepa/ccenepa/sec4.pdf) states, "If cause-and-effect relationships cannot be quantified, or if quantification is not needed to adequately characterize the consequences of each alternative, qualitative evaluation procedures can be used...Often, the analyst will be limited to qualitative evaluations of effects because cause-and-effect relationships are poorly understood or because few site-specific data are available" (p. 41). Additional clarification specific to the sited projects will be added to Chapter 4, Section 4.19.3, as the third paragraph of the section: Several of the listed cumulative actions could impact water levels in Chatfield Reservoir, including the Chatfield Reservoir Drought Drawdown, the Last Chance Water Diversion to Conduit 20 at Kassler, and the Denver Water Temporary Chatfield Pump Station. The Chatfield Reservoir Drought Drawdown involves use of stored water below 5,423 feet msl. During drought conditions, pumping would allow use of water in the drought pool, between 5,423 and 5,385 feet msl. Similarly, the Last Chance Water Diversion project would divert water from Chatfield Reservoir only during drought conditions. The Temporary Chatfield Pump Station would allow	NEPA

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		Denver Water to pump water from their existing water storage rights (between 5,432 feet msl and 5,427 feet msl). These projects could decrease pool levels related to water storage at or below 5,432 feet msl. Implementation of Alternatives 3 or 4 would not impact pool levels until water storage reached 5,437 ft msl, higher than the levels at which other proposed projects would affect pool levels. Pool level changes at Chatfield Reservoir under Alternatives 3 and 4 would not be additive with pool level changes from other potential projects.	
529, 554	The cumulative affects analysis does not discuss flow depletions on the Platte River system. The DEIS notes there will be a reduction in flows below Chatfield but the cumulative impact section does not mention other proposed water projects that will also reduce flows in the Platte River. In addition, there is speculation that the water providers may acquire/transfer additional water rights, not described in the DEIS for Chatfield. This could lead to additional depletions. Cumulative impacts of the Chatfield project together with the Gross Reservoir expansion and other projects could be significant. These projects will enable Denver Water and other utilities to increase diversions and thus reduce flows in the South Platte River. The impacts of additional depletions from the Chatfield participants must be assessed – and mitigation prescribed – within the context of these larger cumulative impacts.	Cumulative impacts of flow depletions on the Platte River system, including impacts associated with other proposed water projects, are discussed in Section 4.19.3. The following two paragraphs will be added to Chapter 4, Section 4.19.3, immediately following the second paragraph of that section: "The analyses in Appendices H, I and R included assessment of potential changes to downstream flows in the South Platte River under Alternative 3. Alternative 3 would result in more available water storage in Chatfield Reservoir, which could reduce flows downstream. Under Alternatives 3 or 4, the Downstream Users (defined in Appendix R) would release their water right allocations from the reservoir and divert the water further downstream on the South Platte River. The Upstream Users would divert their water directly from Chatfield Reservoir and not release it downstream. The net effect of Alternative 3 on flows immediately downstream of the reservoir is small (a maximum of 2.8 to 7.3 percent). Furthermore, all water projects with the potential to affect streamflows in the South Platte River downstream of Colorado in Nebraska are addressed under the South Platte Water Related Activities Program (SPWRAP) (see Appendix V, Attachment 1), which prevents detrimental cumulative impacts by evaluating each project. The lack of significant effects under Alternatives 3 and 4, combined with the broader consideration of the SWRAP makes the potential for cumulative effects on downstream flows of Alternatives 3 or 4 with other water projects unlikely. The proposed alternatives, in combination with the list of past, present, and foreseeable future water development projects, may result in acquisition and transfer of water rights; however, changes in water rights are not anticipated to alter the hydrologic regime of	NEPA

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		this river basin. As described in Section 4.3, when flows enter the reservoir, the first commitment would be to meet senior water rights needs. Once those needs were met, any excess flow would be retained in the available storage of the reservoir (below the maximum elevation of the pool containing conservation storage). After the water levels reached the base elevation of the exclusive flood control pool, any excess flows would be released downstream. Any project that may potentially impact the Platte River system would be permitted and operated in accordance with the Platte River Recovery Implementation Program (see Appendix V, Attachment 1). The overall cumulative impacts of flow depletions on the Platte River system would not likely be significant."	
529	The summary of scoping comments in Appendix S did not include those of ASGD. The comment period for scoping of issues for the DEIS began in November 2004 but was extended to March 10, 2005; comments by ASGD were submitted March 5, 2005.	ASGD's letter of March 5, 2005 is cited in Appendix P ("Public and Agency Scoping Comments"); see Tracks 85-109 in the summary table in Appendix P.	NEPA
529	The letter from the U.S. Fish and Wildlife Service in Appendix X is only part of the Fish and Wildlife Coordination Act report. It amends the 2006 Planning Aid Report; together the two letters constitute the Draft FWCA report (Letter of Susan Linner, FWS to Kayla Uptmor, USACE, 07/8/10). The 2006 PAR should also be included in Appendix X. We note that the Service is concerned that 1) impacts be FULLY mitigated (emphasis ours); 2) mitigation occurs in advance of impacts to the extent possible; and 3) priority is to mitigate on/near the project site. We share these concerns as well.	The 2006 Planning Aid Letter will be added to Appendix X for the Final FR/EIS.	NEPA
537	When the U.S. Fish and Wildlife Service provides the Corps with a biological opinion in accordance with the ESA, it should be circulated to the public and subsequently appended to a supplemental DEIS and filed in the Record of Decision.	The final biological assessment and the Service's Biological Opinion will be part of the final record.	NEPA
537, 605	In addition, selection of this preferred alternative is inconsistent with the Corps' regulations that state, "The first step of mitigation planning is to seek to avoid or minimize harm."	As required by the National Environmental Policy Act of 1969 (NEPA) and other applicable statutes, when formulating plans to be considered for a project, opportunities to reasonably avoid or minimize adverse environmental impacts and mitigation is required. Each plan formulated considered mitigation as an integral part of each alternative. For example, considerations of minimization within alternative 3 included reallocation from the conservation pool to	NEPA

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		avoid flood impacts, minimizing take of trees by limiting clearing up to a certain elevation, consideration of ways to reduce amount and timing of pool level fluctuation and other adaptive management options to reduce overall mitigation needs.	
879	It would be helpful to have had this kind of dialogue at the front end of the process rather than at the end of the process. It is possible that millions of dollars could have been saved by the Feds and state if we had taken this back earlier. The state can always use the same dollars to support our other important resources such as medication, health care, and more drilling standards for the Colorado Oil and Gas Conservation Board.	As required by the National Environmental Policy Act of 1969 (NEPA), scoping was conducted at the beginning of the process to determine the scope of the main issues to be addressed in the EIS. The scoping process and concerns identified in scoping are discussed at section 1.7.3 of the report. The Corps hosted scoping meetings for the public on October 26 and 27, 2004. An additional agency scoping meeting was held February 10, 2005. USACE received 29 verbal comments at the meetings, as well as 17 letters containing a total of 160 comments and 11 emails with comments, totaling approximately 200 individual comments. Comments ranged from broad concerns to very specific positions or recommendations for analysis and provided input on all aspects of the FR/EIS process, including authorizations, alternative analyses, baseline conditions, impact analyses, and mitigation.	NEPA
285, 529	The discussion of noise impacts considers only noise during construction. However, some relocated facilities will be closer to Hwy 121. The DEIS needs to evaluate noise levels at the proposed sites of relocated facilities and their impact on park visitors' aesthetic and recreational experience. Noise impacts don't consider the affects of having less available land area available for land-based activities. Analysis needs to be conducted.	Impacts under Alternatives 3 and 4 post-construction at the relocated facilities would not be substantively different than under Alternative 1. There would be only small changes in distance between the recreation facilities and Highway 121 under Alternative 1 vs. Alternative 3. The following paragraph will be inserted at the end of Section 4.13.3, Alternative 3--20,600 Acre-Foot Reallocation (after the first paragraph on page 4-114), "No significant short- or long-term adverse impacts are anticipated from on- or off-site noise after construction. Distances between recreational facilities and Highway 121 (Wadsworth Boulevard) were evaluated for Alternatives 1 and 3. Because parking areas receive a high concentration of vehicle and traffic noise, noise levels would not change appreciably if parking lots moved closer to Highway 121 under Alternative 3. The North Boat Ramp, Swim Beach, Catfish Flats and Fox Run picnic areas would move closer to Highway 121 under Alternative 3 by approximately 210, 420, and 370 feet, respectively. With these small changes in proximity, noise levels from traffic on Highway 121 at the relocated facilities would not be significantly different after construction than traffic noise levels from	Noise

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		at the current facility locations. As with Alternative 1, increases or decreases in noise levels would occur during various times of the year, typically correlated to the amount of recreational use and traffic at the time."	
162, 163, 250, 336, 441, 607, 824, 868	Many are suggesting that the **wildlife will "Disappear." I don't agree.** Wildlife will adapt to the new reservoir conditions. Birds and other animals will have new edges and habitats to use. Even when Chatfield was originally built, some folks didn't want it, saying it would ruin the area and habitats. The habitats survived, and have flourished.	Comment Noted.	noted
57, 61, 76, 98, 118, 125, 127, 129, 130, 135, 137, 179-182, 184-185, 192, 193. 194, 196, 197, 199, 200, 201, 202, 205, 208, 209, 215, 225, 228, 229, 230, 232, 243, 251, 252, 253, 255, 284, 304, 313, 314, 329, 375, 461, 465,466, 467, 476, 518, 541, 545, 551, 568, 573, 574, 584, 628, 702, 709, 711, 721, 724, 728, 767, 784, 862, 868, 872, 893, 896	The proposed mitigation environmental impacts have been sufficiently identified and will be responsibly mitigated by the water users.	Comment noted.	noted
132, 136, 205, 217, 243, 250, 274, 356, 364, 388, 451, 479, 554	It is an environmental challenge for water providers to come up with a solution that minimizes the impacts of water projects. Environmentalists seem to oppose every effort to construct new water storage, and therefore Chatfield is a must, since the **impacts of the reallocation compared to new dams is less**. Chatfield Reallocation exemplifies the opportunities available to state water planners to meet reasonable anticipated water needs without building expensive, energy-consuming, and environmentally-	Comment noted.	noted

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	damaging large-scale concrete and steel water project proposals.		
266, 270, 272, 275, 276, 277, 278, 281, 283, 287, 288, 294, 297, 298, 311, 315, 317, 327, 331, 332, 335, 341, 342, 345, 346, 350, 354, 365, 366, 367, 369, 370, 371, 373, 374, 380, 386, 387, 390, 391, 402, 403, 409, 423, 427, 434, 458, 475, 488, 493, 495, 496, 503, 508, 512, 513, 514, 516, 519, 526, 527, 528, 529, 531, 534, 535, 542, 543, 547, 548, 549, 550, 552, 559, 566, 586, 589, 590, 591, 592, 601, 605, 611, 618, 623, 626, 629, 630, 632, 634, 635, 638, 639, 640, 641, 642, 643, 644	Agricultural and residential users of the increased water dominate the study group and thus it appears heavily biased.	Information in the feasibility report and environmental impact statement was based on science and prepared by technical experts with expertise in several fields but particularly within areas of engineering, environmental sciences, recreation and economics.	Planning Process
59, 179-182, 184-185, 193. 194, 196, 199, 200, 202, 205,208, 209, 217, 218, 229, 230, 243, 379, 465,466, 467, 481, 541, 568, 691, 709, 711, 785, 786, 852, 854, 860, 862, 890, 893	The project is a great example of cooperation to secure water supplies in the Denver Metropolitan area. The Reallocation project has been developed using a very **open and inclusive planning process.**	Comment noted.	Planning Process

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135	This is an impressive document combining the work of the USACE and many agencies in determining the best course of action for the benefit of the Denver Metro area. The Corps has used scientific based inquiry and objective analyses in making a strong, evidence based case for Alternative 3.	Comment noted.	Planning Process
170, 183, 362, 561, 660, 671, 663, 814	How come the general public has not been properly informed? Give everyone who goes to the park this information and see what the consensus will be. Few people (by design) are aware of what is about to happen to one of our closest and yes greatest Colorado (Denver Metro Area) recreation areas. Why wasn't the "environmental impact statement" available at Chatfield? It could have been handed out at the booths, upon request of an individual. Please make public meeting posters available ASAP.	The release of the draft FR/EIS was posted in the Federal Register on June 8, 2012. The Corps of Engineers sent a press release out as well. A hard copy of the Feasibility Report/Environmental Impact Statement was available at each of the 3 public meetings for viewing. CD's were available to the public to take home with them as well. A copy of the Feasibility Report/Environmental Impact Statement was available at Chatfield Visitor Center and at the following locations:Highlands Ranch Library, 9292 Ridgeline Blvd., Highlands Ranch, CO 80129, 303-647-6642.Colorado Water Conservation Board, 1313 Sherman Street, Room 721, Denver, CO 80203, 303-866-3441.Columbine Library, 7706 West Bowles Avenue, Littleton, CO 80123, 303-235-5275.Lincoln Park Library, 919 7th Street, Suite 100, Greeley, CO 80631, 970-546-8460.Aurora Public Library, 14949 E. Alameda Parkway, Aurora, CO 80012, (303) 739-6600 Information was/is available on the following two links:http://www.nwo.usace.army.mil/Missions/CivilWorks/Planning/PlanningProjects/ChatfieldReallocationStudy.aspxhttp://chatfieldstudy.org	Planning Process
411	p. ES 6, 2nd para - The old P&G criteria of “completeness, effectiveness and acceptability” are non-operational as they always have been.	As specified by the Economic and Environmental Principals for Water and Related Land Resources Implementation Studies, paragraph 5.d, these criteria will be considered in making a final determination regarding the allocation of storage at Chatfield Reservoir for municipal and industrial water supply purposes. The criteria were also considered in preparation of the draft report.	Planning Process
502	Approval of the FR/DEIS should not be granted until finalized plans for these amenities can be provided as a part of the FR/EIS for public review.	Figures 3-15 and 3-16 will be revised to include Douglas County's "Riparian Conservation Zone" and the U.S Fish and Wildlife Service's designated critical habitat for Preble's.	Planning Process
502, 506	If a reallocation is to occur, it should offer a mitigation and recreation modification plan that gives back to the public existing or enhanced levels of resource benefits currently provided at Chatfield State	Some recreation resources at Chatfield State Park, such as mature trees, will be replaced by planting as part of recreation modifications and the compensatory mitigation plan. However, the planted trees	Planning Process

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	Park.	will require a decade or longer to grow to maturity; this was a major factor in the reduction in recreation benefits at Chatfield State Park due to reallocation for Alternatives 3 and 4. The costs of reallocation for the tentatively selected plan (Alternative 3) were calculated two ways; one way used National Economic Development (NED) costs, which include lost recreation benefits; the other way used financial costs only. Alternative 3 was the least costly plan for both methods.	
526	The report should provide standard error estimates for all critical numbers.	All appropriate guidance was considered in the preparation of the analysis. The addition of risk analysis using a Monte Carlo simulation or other tool, as required in some other Corps studies, would not add appreciably to the decision to be made while adding significantly to the cost and complexity of the study.	Planning Process
529	Other constraints listed in Chapter 2 include “Maintain the conservation pool in Chatfield between 5,423 ft. msl and 5,432 ft. msl…” Alternatives 3 and 4 violate this study-specific constraint, which suggests they should not even have been considered.	The constraint is specific to the legal requirements of the contract between the Corps and state to maintain water in the lake. The remaining portion of that constraint states "...consistent with the contract between the Corps of Engineers and the state of Colorado (March 1, 1979). The state of Colorado signed an agreement with Denver Water granting them the exclusive right to store water in Chatfield in the conservation pool. Storage below 5,432 ft. msl cannot be reallocated because of the in-place contract and agreement." Thus, water could not be reallocated from the existing pool due to this constraint.	Planning Process
529	Constraints also include “public acceptability” but the providers and the Corps have made little attempt to engage a broad spectrum of the public to determine “acceptability” of the project. Most of the testimony at the public meeting of 6/26/2012 strongly opposed the reallocation. The Chatfield providers have used a coordinated PR effort to solicit local government support but this differs radically from an open and honest public discussion of project impacts.	Acceptability is the workability and viability of the alternative plan with respect to acceptance by federal and non-federal entities and the public and compatibility with existing laws, regulations, and public policies. However, just because a plan is not the preferred plan of a portion of the public does not make it unacceptable ipso facto. Obviously, the extent to which a plan is welcome or satisfactory is a qualitative judgment. Nevertheless, discussions as to the degree of support (or lack thereof) enjoyed by particular alternatives from a community, agency, or organization will be considered prior to carrying the alternatives forward for implementation. The final EIS will contain an update to Chapter 6 "Public Involvement, Review, and Consultation" of the report that captures discussion of all public comments received during the public review of the draft and the public hearings.	Planning Process

Commentor Number	Comment	Response	Category
		It is noted that much of the testimony at public hearings held on 6/26/2012 were against a reallocation, but much of the testimony at the public meetings of 6/25/2012 and 6/27/2012 had testimony that were largely in favor of a reallocation.	
372, 509, 604	Overall, there will be a **loss of 500 acres of land** from the park. Water providers are mitigating facilities, so why not make them replace the 500 acres as well? The people using this park are effectively all being herded into a smaller and smaller corner and told to enjoy it to the same level of recreation.	The National Park Service's October 4, 2012 letter (Appendix S, Attachment 3) states that this change of land acres to water acres is not a section 6(f) (3) conversion to non-recreational uses under the Land and Water Conservation Fund program; therefore, replacement of this land acreage is not required. Many Chatfield State Park visitors would not experience the same level of recreational enjoyment after reallocation; this is documented in Appendix T. Recreational benefits for land/vegetation-based activities, such as picnicking, wildlife viewing/photography, environmental interpretation/education, horseback riding, and training dogs for tracking or search and rescue, are reduced more than other activities at Chatfield State Park due to greater reductions in visitation (Appendices T and U) and in recreation value per day (Appendix T). However, this reduction in benefits was not great enough to outweigh cost factors in selection of Alternative 3 as the tentatively selected plan.	Rec
139, 336, 338, 441, 451, 541, 585, 607, 725, 870	Although I understand there will be disruptions in the way I currently use Chatfield, I think it's a worthy tradeoff considering our community's need for water storage.	Comment noted. Although the recreation modifications will provide the same amount and type of recreational facilities as the existing facilities they replace, there will be some changes to which Chatfield visitors will need to adjust.	Rec
32, 80, 95, 101, 102, 103, 105, 120, 123, 135, 148, 153, 154, 157, 160, 161, 169, 170, 171, 183, 188, 204, 211, 233, 235, 238, 239, 241, 245, 256, 259, 264, 266, 269, 270, 271, 272, 275, 276, 277, 278, 280, 281, 283, 285, 286, 287, 288, 289,	I am a user of the state park and/or I understand how important the park is to people. I do not want to see it change for the worse. Recreational uses of the **state park will be greatly diminished** for the benefit of water supply. Sacrificing one of the few recreational areas in the metro area, and one of the most highly used parks in the state is not the correct solution to water supply.	Chatfield State Park recreational facility modifications due to the reallocation will result in the same number and amount of recreational facilities after reallocation as exist now (Appendix M). These facilities will be new, whereas many facilities they will replace are about 30 years old. However, it will take time for newly planted woody vegetation to grow to maturity, and as it matures there is expected to be less reduction in visitation of tree-oriented picnickers, horseback riders, and those engaging in wildlife viewing/photography and environmental interpretation/education. Overall reductions in visitors to Chatfield State Park (not taking into consideration that many "lost" Chatfield visitors would actually recreate at substitute sites) would be 17.6% during construction,	Rec

Commentor Number	Comment	Response	Category
290, 291, 292, 293, 294, 297, 298, 300, 302, 310, 311, 312, 315, 317, 319, 324, 325, 326, 327, 331, 332, 335, 337, 339, 340, 341, 342, 344, 345, 346, 349, 350, 352, 353, 354, 358, 362, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 376, 380, 381, 384, 386, 387, 389, 390, 391, 392, 393, 394, 396, 397, 401, 402, 403, 406, 409, 410, 412, 413, 415, 423, 425, 427, 432, 433, 434, 438, 442, 446, 448, 453, 454, 458, 464, 471, 472, 473, 475, 478, 487, 488, 495, 496, 500, 503, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 516, 517, 519, 521,524, 526, 527, 528, 529, 530, 531, 532, 534, 535, 536, 537, 538, 539, 540, 542, 543, 547, 548, 549, 550, 552, 557, 558, 559, 560, 562, 563, 565, 566, 572, 579, 581, 582, 586, 589, 590, 591, 592,		9.4% during the first 5 years after reallocation, and 4.1% during 6-50 years after reallocation (Appendices T and U).	

Commentor Number	Comment	Response	Category
593, 594, 595, 597, 598, 599, 601, 605, 606, 611, 614, 615, 617, 618, 619, 620, 621, 622, 626, 629, 630, 632, 634, 635, 638, 639, 640, 641, 642, 643, 644, 646, 647, 650, 653, 655, 658, 666, 667, 668, 669, 670, 671, 663, 794, 795, 796, 797, 798, 799, 800, 801, 807, 808, 810, 811, 812, 813, 816, 817, 818, 821-823, 825-851, 865, 873, 879, 883			
18, 139, 192, 201, 202, 205, 243, 284, 296, 329, 364, 476, 520, 541, 570, 701, 717, 728, 824, 870, 872	The project, as planned, is balanced, and creates a win-win. Water supply can be provided at the reservoir, while recreational modifications will be sufficient to maintain a "like experience" at Chatfield. New recreation facilities will benefit many in this area. In addition, it is not uncommon for grass and wildlife to thrive in reservoir areas that were previously flooded. And of course, while those areas were covered with water, they greatly expanded flat water for both waterfowl and other forms of open water recreation, concluding that periodic increased water levels are only a negative impact to recreation is unsupportable.	Many buildings/facilities associated with the shoreline will be reconfigured to account for additional water level fluctuations. This will include newly constructed facilities to replace those impacted by additional water. The recreational modification plan is meant to not necessarily improve facilities, but to facilitate an equal recreational experience at Chatfield.	Rec
285	It needs to be recognized that the recreation season is year round at Chatfield State Park.	It is recognized that Chatfield visitation occurs year-round. Table 3 of Appendix T shows visits per month for each activity. Table 3 shows that for all activities combined, visits occurring from April through September constitute over three-fourths of total annual visits.	Rec
236	Would the stables be relocated and is this cost included in the plan?	The stables will not need to be relocated, but many of the equestrian trails will need to be relocated. Relocation of inundated trails is included in the estimated cost of recreation modifications.	Rec

Commentor Number	Comment	Response	Category
279	I am curious if the proposed improvements include changes to the day use areas and campgrounds.	The campgrounds, model airplane area, no-leash dog exercise area, and Spring Gulch equestrian area would need no modifications. The remaining day use areas would need modifications, and many segments of equestrian trails, pedestrian/bicycle trails, and trails used for hiking and wildlife viewing/interpretation would need to be relocated.	Rec
8	Study is flawed, as USACE cannot value recreation as a primary use of the facility since that is not part of its core missions - therefore USACE cannot correctly value the loss of recreational opportunities for the public caused by the proposed project, nor re-create similar recreation opportunities.	USACE, Authorized and Operating Purposes of Corps of Engineers Reservoirs, July 1992, Washington, DC, p. E-15 lists four purposes for Chatfield Dam and Lake that are both authorized and operating purposes: recreation, flood control, fish/wildlife, & water supply. Engineer Regulation 1105-2-100, Appendix E, Civil Works Missions and Evaluation Procedures, Section VII - Recreation and USACE Economic Guidance Memorandum 11-03, Unit Day Values for Recreation for Fiscal Year 2011, were used in determining the National Economic Development (NED) recreation benefit losses over the 50-year period of analysis for Chatfield Reallocation Alternatives 3 & 4.	Rec
148	Is it true that during same period when the park is at peak use, water will tend to be at its lowest, thus affecting recreation to a great degree?	Appendix B, Water Control Plan, Section 7-06, states that the governor of Colorado has obligated the state to provide sufficient water to fill the reservoir to elevation 5432.0 feet above mean sea level and to replace annual evaporation losses. The agreement with Denver Water to maintain its water levels within the multipurpose-conservation pool at or above 5426.94 feet above mean sea level from May 1 to August 31 each year, except during a severe and protracted drought, is still in effect after reallocation. The Water Providers will store their water above that of Denver Water, whose stored water would keep water elevations from falling below 5426.94 feet during the summer recreation season even if the Water Providers release all their stored water, unless there is a severe and protracted drought.	Rec
151	Having more water in storage would help alleviate low water years at Chatfield with regard to recreation.	This is true, and the bottom elevation of boat ramps will extend to allow boat launching down to 5423.0 feet above mean sea level, the lowest elevation at which water can be released by Denver Water.	Rec
525	The Swim Beach Inventory in the Recreation Facilities Modification Plan is incomplete as a launching area for hand-launched boats is not considered. Replacing affected facilities and use areas in kind	Your comment will facilitate the non-federal sponsor's siting and design of the area for hand launching boats to achieve a recreational experience as similar as possible to the experience	Rec

Commentor Number	Comment	Response	Category
	cannot be met if there is not consideration of the impacts and appropriate mitigation for this use. An “in kind” use area for hand launched boats would be an area in the no wake zone within the same walking distance from the current parking lot to the most frequent water line.	provided by the current boat hand-launching site.	
529	Description of relocation of some recreation facilities is missing in Appendix M - 1) There are no picnic areas mentioned in the list of relocated facilities at Massey Draw; 2) no mention of the old asphalt trail on the west side of the South Platte River, south of the main park road; 3) horse trails on both sides of the river.	Page A1-4 of Appendix M lists the relocation of 8 picnic tables at Massey Draw. Figure 3-13 shows planned trails south of the main park road near the South Platte River. The horse trails do not show up on any existing maps and will be part of more detailed design activities, which will include Colorado Parks and Wildlife employees.	Rec
529	Relocation of picnic areas will involve bringing in fill material to elevate them above the 5444’ msl line. How these facilities will be accessed at high water, how they will be protected from wave action, and how they will be made accessible to visitors with disabilities is not discussed.	These concepts will be part of the design process and involve representatives from Colorado Division of Parks and Wildlife and the Corps of Engineers.	Rec
529	A definitive plan for the marina relocation has not been finalized, and costs included in the mitigation calculations will have to be adjusted when that occurs.	The feasibility study does include costs appropriate for feasibility level analysis. Feasibility studies and NEPA do not require final design or final costs be completed, just that costs are developed in a comparable manner across all alternatives so reasonable comparisons may be made between alternatives.	Rec
628	Chatfield State Park will be required to increase its daily, weekly and monthly operation and maintenance of those facilities to adjust for the fluctuations in water levels. Chatfield State Park, and perhaps its concessionaires, will also experience a loss of revenue from decreased visitation; first during the initial mitigation process and later as a result of less usable park land and watchable wildlife, and more closures of park facilities located within the 10-year flood plains. We strongly suggest that, an explicit term and condition should be included in the ROD requiring the Chatfield Water Providers to reimburse Parks and Wildlife for all lost revenue and increased operational and maintenance costs throughout the life of the project.	The recreation modification plan is considered to be an integral component of the tentatively Federally Recommended Plan, as it is required to address the adverse impacts caused by operating the reservoir under the new system, which involves a significant change in how water levels fluctuate within the reservoir. The recreation modifications can be fully accomplished within the current boundaries of Chatfield State Park, and are considered sufficient for maintaining recreational purposes of the Corps' project. The DEIS does identify that while it is outside of the tentatively Federally Recommended Plan, the water providers would reimburse Colorado State Parks and the marina operators on an annual basis for lost revenues that result as a consequence of reallocation, as well as any increased costs that Colorado State Parks incurs. The water providers are currently working with the Colorado Parks and Wildlife to provide additional assurances of a like recreational experience, to compensate State Parks for lost revenue or	rec

Commentor Number	Comment	Response	Category
		increased costs, and to provide ecological benefits above and beyond where the CMP has planned to replace ecological functions identified to be significantly affected.	
5, 66, 211, 443, 506, 604, 614, 667, 801, 809	Boating will be affected - Examples include: hazards due to shallow areas and associated debris; shoreline for launching sailboats will be affected; relocation of boat ramps and marina will be problematic due to lay of land.	The boat ramp and marina facility modifications will be well designed, and existing topography will be regraded to provide as much functionality as currently exists regarding boat launching. In-kind recreation modifications are required, so existing sailboat launching facility characteristics will be reasonably accommodated in the marina/south boat ramp area modification designs.	Rec-Boat
514, 515, 529	The study does not seem to include the recreational impact the water allocation plan would cause to the horse stable concessions, its clients, and the community. A large part of the enjoyment of these trails are the horseback rides around and through the Cottonwood areas and the gravel ponds on the south end of the reservoir that will be destroyed by the water allocation plan. It will not be easy to reroute trails to allow one hour or 2 hour rides to take place within, or partially within a wooded setting. The woods is what makes the rides so appealing. The horse stable concession would need to be relocated in order to serve our clients.	It is not accurate to say the gravel pond on the south end of the reservoir is being destroyed; instead it is being saved by new berming around it and other measures. The majority of the features on the south end of the park that are used by the horse stables are not being significantly changed or impacted by the reallocation project and are not judged to require a relocation of the horse stable concession to serve its clients.	Rec-Horses
515, 529	Some borrow sites will be located adjacent to the stables, causing stress to the animals, and making rides unpleasant to clients.	Efforts will be made to minimize effects to animals and riders by using barrier fencing and timing the construction to seasons when there is less riding.	Rec-Horses
66, 80, 169, 259, 278, 303, 395, 397, 400, 450, 498, 519, 856	Loss of the gravel ponds would be devastating. These ponds are currently separate water features from the lake, and they provide a much-appreciated haven for park visitors who prefer to recreate away from the more intense water recreators (i.e. powerboaters, etc.). These ponds are also important to maintain, as they serve as important venues for other specific uses that the lake cannot provide, such as emergency rescue training, open water swimming, scuba certification, etc.	The great majority of visitors to the gravel ponds use the large gravel pond; this is the gravel pond where scuba diving certification training, open-water/long-distance swimming, and water rescue dog training occur. The large gravel pond will not be inundated after reallocation because it will be protected by a berm/dike (Appendix M, pp. 3-12 and 3-13). The Kingfisher Day Use Area will be relocated to the west, with facilities similar to the existing ones, including trail connections; borrow area configuration would be done to enhance the fishing opportunities and recreation experience (Appendix M, pp. 3-12 and 3-13).	Rec-Ponds
856	We support the mitigation in Alternative No. 3 where a berm is built that saves the lower Platte from being flooded. We have approximately 1,000 of our members swim out there each summer between May and September.	Comment noted.	Rec-Ponds

Commentor Number	Comment	Response	Category
5, 125, 151, 395, 439, 440, 443, 502, 506, 525, 544, 604, 628, 647, 671, 672, 663, 798, 799, 803, 807, 809, 811, 812, 821, 857, 879	**Shoreline dependent recreation** will now need to deal with much larger beaches, with the water's edge being much further away from facilities than they used to be. Impacted recreation due to this include the swim beach and picnic areas. Water availability on a sporadic basis would create problems with facilities being usable, etc. (e.g. Boat ramps high and dry). How will this be addressed? Safety concerns will be an issue if kayakers and rowers have to launch at boat ramps because we cannot carry our boats from the parking lot to the water line at the swim beach. Recreational facilities may often be located a considerable distance from the physical water level, and 587 acres of land that is intermittently inundated with water stored in the reallocated space will become unusable for recreation. Will the boating area increase? When reconfiguring the docks and boat ramps, suggest that you remove the docks from the boat ramp and relocate them to some point away from where traffic loads and unloads boats. This would allow boaters to either come in and pickup/drop-off a driver without disrupting loading/unloading.	Boat ramps would be constructed to extend to the elevation of the existing ramps in order to operate at low water levels (Appendix M, p. 3-2). The swimming beach area will be regraded at a greater slope to minimize the distance between shore facilities and the water's edge at low water conditions (Appendix M, p. 3-6). For picnic areas inundated at 5,444 ft msl, the same number, type, and capacity facilities would be developed at a higher elevation, in reasonable proximity to restrooms and parking. The National Park Service's October 4, 2012 letter (Appendix S, Attachment 3) states that this change of land acres to water acres is not a section 6(f) (3) conversion to non-recreational uses under the Land and Water Conservation Fund program; therefore, replacement of this land acreage is not required. Recreational activities will still be allowed to occur in areas affected by water level fluctuations. However, it is documented that many Chatfield State Park visitors would not experience the same level of recreational enjoyment after reallocation (Appendix T). Recreational benefits for land/vegetation-based activities, such as picnicking, wildlife viewing/photography, environmental interpretation/education, horseback riding, and training dogs for tracking or search and rescue, are reduced more than other activities at Chatfield State Park due to greater reductions in visitation (Appendices T and U) and in recreation value per day (Appendix T). However, this reduction in benefits was not great enough to outweigh cost factors in selection of Alternative 3 as the tentatively selected plan.	Rec-Shore
86, 234	New developments have been put on hold due to the inability to provide an acceptable water supply for fire suppression, as required by local fire codes. Water supplies for fire suppression for residential and wildland fire fighting is of great concern. There are several areas in the south metro area that lack a water supply, presenting operational challenges for firefighting, and additional equipment costs for water tenders.	Comment noted.	Safety
460	3.8.1, p. 3-48. - The USFWS 2002 list of Birds of Conservation Concern was updated in 2008. Species listed for USFWS Region 6 have changed. See: http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialT	The list of Birds of Conservation Concern in Section 3.8.1 will be updated based on USFWS' 2008 publication.	Sp.List

Commentor Number	Comment	Response	Category
	opics/BCC2008/BCC2008 .pdf for the current list.		
3, 211, 223, 224, 263, 269, 302, 321, 340, 349, 361, 377, 381, 410, 412, 420, 453, 486, 488, 503, 507, 509, 524, 526, 529, 537, 539, 553, 558, 563, 602, 615, 623, 660, 669, 663, 821, 874	A close examination of the records of bird species (and other species) observed in the park in breeding, migration and wintering seasons must be done and accurately reported in the DEIS. The current inaccuracies result in an understatement of biological resource values of bird species and influence the Ecological Functions Approach and mitigation plan. Many dozens of bird species present at Chatfield were left out of the study, and well-documented bird counts done over past years, throughout the year, from multiple park locations, were rejected in favor of a cursory two-day bird count for the FR/EIS. The expert on reptiles and amphibians pointed out that FR/EIS information on them came from a field guide with no specific reference to Chatfield, and that it included many southwest American species not found in the park. ---I was dismayed at the use of the data in Appendix Q as a basis for measuring bird diversity as recorded in Table 3-3 in the DEIS. There is no indication of methodology (Area of observation points? Time of day and number of hours of observance? Number of observers? Time between the two observations in June? Weather? Possible singularities of 2006?). Basically the data, as presented, are uninterpretable. It is no wonder that Western Meadowlark and Lark Sparrow (grassland ground nesters), some of whose habitats will be affected, were not listed since only 3 habitat types (wetland, shrub, tree) were sampled. Because Table 3-3 does not contain information from the bird counts mentioned above, and it is unclear exactly where the data come from, the figures under-represent the bird resource at Chatfield and bias the mitigation process. ---The Northern Leopard Frog, designated a Species of Special Concern in Colorado, was also left off the FR/EIS list even though Chatfield is one of the very few places it is currently found. This rushed treatment of critical wildlife species casts substantial doubt on the Corp's objectivity and commitment to preserving wildlife. ---Beaver are a keystone species and are not mentioned once except in reference to beaver ponds when mentioning frogs. There are several beaver dams along this length of river, and incredibly beautiful habitat treasured by humans and animal species alike.	The point count survey was just one of many tools and resources considered in developing the technical approach and mitigation plan for addressing impacts to avian resources at Chatfield. Data reviewed and evaluated by the Ecological Functions Technical Committee included bird surveys conducted at Chatfield State Park by Hugh Kingery, Joey Kellner, and others, with additional supporting information from the Colorado Breeding Bird Atlas, Rocky Mountain Bird Observatory, Colorado Urban Wildlife Partnership, and Colorado Parks and Wildlife. Furthermore, the "Final Ecological Functions Approach for Terrestrial Habitats at Chatfield Reservoir" (ERO, 2009) describes how sensitive species were selected by the technical committee. Sensitive species are defined as federal- or state-listed species, and species tracked by the Colorado Natural Heritage Program (CNHP) and Birds of Conservation Concern (BCC) for Regions 16 (Southern Rockies) and 18 (Shortgrass Prairie). A list of sensitive species based on the data sources described above was compiled and reviewed by the committee. Each sensitive species was placed into appropriate habitat(s) by season of occurrence based on literature accounts, professional opinion, and the consensus expertise of the committee. Each species was placed into one or more of the five mapped habitat types based on its primary season of use within the Chatfield basin: year-round, summer (breeding), winter (nonbreeding), and migration. The approach to conducting the 2006 point count surveys was discussed with and reviewed by the U.S. Fish and Wildlife Service. The FR/EIS indicates that the data presented in Table 3-3 and discussed in the text are from 2006, however, we will revise the text to further clarify that it is from the June 2006 field studies conducted by the Corps' contractors. We will delete the reference to Audubon Society of Greater Denver regarding Table 3-3 to make it clear that ASGD's data were not used in the table. As indicated in the response to Audubon's comment below (regarding Tables 3-3 and C-1), the point count survey was just one of many tools and resources considered in developing the technical approach and mitigation plan for addressing impacts to avian resources at	Sp.List

Commentor Number	Comment	Response	Category
	-	Chatfield. As stated in the "Final Ecological Functions Approach for Terrestrial Habitats at Chatfield Reservoir" (ERO Resources, December 15, 2009) under species richness and abundance "Available data from bird species lists collected by Chatfield State Park and Audubon, and surveys conducted by volunteers and experienced birders were reviewed and evaluated by the committee." These data and surveys included bird surveys conducted at Chatfield State Park by Hugh Kingery, Joey Kellner, and others, with additional supporting information from the Colorado Breeding Bird Atlas, Rocky Mountain Bird Observatory, Colorado Urban Wildlife Partnership, and Colorado Parks and Wildlife. Additional bird species will be added to Appendix F based on Kellner and Spencer (2006) to supplement the list prepared by Kingery, Kellner, and Rau (Colorado State Parks, 1998). Bird species information will also be added to Appendix F based on Hugh Kingery's comment letter (August 14, 2012), and information from Joey Kellner at the Public Hearing held June 26, 2012. The northern leopard frog is discussed in the Public Draft, however, additional information on this species from Baker and Farah (2009) will be added to Chapters 3 and 4 of the FR/EIS, and this species will be added to Appendix F. The reptile and amphibian species reported at Chatfield by Baker and Farah (2009) will be added to Chapter 3 of the FR/EIS and Appendix F. Beaver do occur at Chatfield Reservoir and are included in the list of mammals in Appendix F; they will also be added to the text (Section 3.8.1).	
493	I examined a few of the many issues related to the DEIS' dismissive stance toward conserving existing ecosystems and robust species diversity. Extensive, carefully accumulated and compiled data on bird species and activities in Chatfield State Park was given to two different parties working on the DEIS. Yet the authors and contractors apparently didn't consider the losses of nature's resources to be serious enough for them to even utilize this and other data available to them free when trying to estimate the value of the habitat within the Park.	See 114	Sp.List

Commentor Number	Comment	Response	Category
3, 526	Perhaps because aquatic habitats were not considered, the surveyors somehow managed to miss several species that would be decimated by the Reallocation Project: the American Dipper, which feeds on invertebrates in the South Platte River, and the Common Merganser and Wood Duck, which nest in the cavities of the mature trees that the Reallocation Project would remove.	The American Dipper, Common Merganser, and Wood Duck all occur at Chatfield Reservoir and were cited in Appendix F of the Draft FR/EIS.	Sp.List
570, 663	Appendix F lists species of mammals, birds, reptiles, and amphibians known to occur in the project area. As noted in footnote (c), species characterized in Colorado State Parks (1998) as "Infrequently Seen" are not included in the table. We suggest that the Appendix F table include species even if they occur infrequently at Chatfield State Park. The Corps should consider combining the Colorado State Park's 1998 list with data that have been provided by J. Kellner (2006). We also note that the northern leopard frog is discussed in the Draft FR/EIS as a Species of Concern (Draft FR/EIS, pages 2-72; 4-99; 4-103; 4-157; 5-12), but needs to be added to the Appendix F table at page F-7 (Kellner, J. and Spencer, A., Checklist of the Birds of Chatfield State Park, 2006).	Appendix F was revised to include bird species from Kellner 2006 and the leapard frog. Also, infrequently seen species as suggested was added to the appendices.	Sp.List
211, 875	Prepare realistic simulation pictures showing now-wooded areas of the park (including the swim beach) as they would appear post-project during prevailing low-water periods. Also, artist renderings or visuals of the recreational modifications are needed. Engineer Regulation 1105 -2-100 specifically requires evaluation of “aesthetics” as part of the planning process and states (page C-38) “It is National policy that aesthetic resources be protected along with other natural resources.” This requirement has not been adequately addressed in the DEIS. During the Chatfield “cooperators” process ASGD specifically requested that either artists’ renditions or computer simulations of Chatfield reservoir under different water levels be included in the DEIS so that the decision-makers and the public could see the potential impacts. The public could use some illustrations and plans showing the proposed improvements and an understanding of what recreation will stay or be changed. What's going to happen between elevations 5432 and 5444 during low water periods? Perhaps include an image of what it's going to look like from the water's edge where the impacted environment is going	Uncommon to show pictures of affects… and there is no certainty as to exactly how it will look. The Final FR/EIS will include a new report on a review of the fluctuation zones of regional reservoirs. Renderings of what Chatfield Reservoir may conceptually look like may be misleading. Conceptual renderings of key pre- and post-locations at Chatfield Reservoir were displayed at the public meetings on the Draft FR/EIS. The renderings were prepared at the request of various stakeholders. The intent of providing the pre- and post-renderings was to provide additional information to the public and agencies on how the reservoir may look following reallocation (selected plan). Instead of increasing clarity for the public, the renderings increased the level of disagreement on how the reservoir would look following reallocation. Based on this experience, adding pre- and post-renderings to the final FR/EIS would not be of benefit to the Final FR/EIS, and is not needed to afford meaningful public disclosure and input, or to assure the quality of the pending Corps decision-making process, or that the purposes of NEPA would be furthered by doing so. Figures are included in the report depicting	Visual

Commentor Number	Comment	Response	Category
	to be in front you in close proximity, not in the distance the way those are all done. Some sort of description about what's likely to grow in that inundated area during the low periods would be good. It would be good for full disclosure.	impacted area of bird habitat, Prebles Mouse habitat and park facilities at inundation at 5,437 ft. m.s.l. and 5,444 ft m.s.l. Please see Figures 3-11, 3-13 and 4-20 respectively.	
67, 282, 435, 455, 499, 599, 603, 609	The water rights are very junior, and water will only be available 3 out of 10 years. What will the reservoir look like the other 7 years?	Reservoir level fluctuations will increase with the reallocation. Overall reservoir levels will be higher with the reallocation. Refer to the Monthly Pool Elevation Duration Curves in Appendix H.	Water Rights
411	The presumed 8,539 acre-feet of yield after subtracting added M&I consumption will do little to augment streamflow in the south Platte and is negligible relative to the need for augmentation for the shut-down wells in Weld County.	The presumed 8,539 acre-feet of yield after subtracting added M&I consumption will do little to augment streamflow in the south Platte and is negligible relative to the need for augmentation for the shut-down wells in Weld County.	Water Rights
214, 647, 529, 623, 825-851	The plan document is basically faulty in that it totally neglects to consider adjacent downstream interests. Most notably, the city of Littleton owns adjudicated water flow rights not mentioned in the document. And, these rights are senior to many of the upstream users that the document is designed to accommodate. Chatfield Reallocation will add very little to regional water supplies, and will reduce instream flows to the South Platte River through Denver and Littleton over 75% of the year. Please work to find an alternative that will preserve the state park and help restore the South Platte River. The Chatfield Reallocation Project is not an acceptable alternative.	All storage of water in Chatfield will be in accordance with Colorado water law and based on the non-injury to senior water right holders. The reallocation is for storage. Water rights, including downstream water rights will be respected just as they have been in the past. Junior rights should not affect adjudicated water rights on the South Platte River.	Water Rights
211	There is question whether some of the 15 water users in the consortium should be allocated Chatfield water storage at all. These are new claims on South Platte River water, above and beyond existing users' water rights. For example, is it fair for Perry Park country club to water its golf course as opposed to leaving Chatfield alone?	All storage of water in Chatfield will be in accordance with Colorado water law and based on the non-injury to senior water right holders.	Water Rights
443, 650	Does changing the use for Chatfield from flood control to storage to M&I storage create water rights issues? Do the water providers have all necessary water or storage rights? Water rights are junior to other water users. Chatfield will be one of the latter users supplied each year.	Water rights are the responsibility of the sponsors obtaining access to storage for water supply pursuant to state law. Storage users should have the necessary water rights for utilization of reallocated storage when an agreement is signed. The Corps will rely on a responsible state authority for the determination regarding water rights.	Water Rights

Commentor Number	Comment	Response	Category
493, 517, 647, 659, 663, 758, 798	Why is Chatfield Reallocation even being considered as an alternative? Because the proponent providers have very junior water rights, reallocation offers them water when they least need it, and no water when they most need it.	The value of storage is to capture water during times of plenty so it can be used during times of scarcity.	Water Rights
541	The majority of water rights available for storage in Chatfield relies on relatively junior priorities and must be captured at times when flows are relatively high. Such flows will be on the order of hundreds or even thousands of cubic feet per second. Diverting this rate of flow from the South Platte River would require massive pump stations and huge pipelines. Use of Reuter-Hess has the same limitations and is also not viable. The basic feasibility and cost-effectiveness of such plans fall far short of storing high flows in the immediate on-stream capacity of Chatfield.	Comment noted.	Water Rights
578	A water supply sensitivity analysis should be done. This is necessary to determine what very dry years, such as the past year or 2002 which are two severe drought water years not included in the historical record, does to these already woeful predictions. The EIS does acknowledge that with climate change, extended periods of drought might become more frequent.	During dry years, water would be withdrawn from storage to meet water demands. If several consecutive dry years occur during a severe drought, storage could be depleted and alternative water supplies would have to be utilized to meet demands.	Water Rights
578	EIS is incomplete for it does not discuss where water might come from to fill the newly acquired storage at Chatfield. Indeed, the river below Strontia Springs Reservoir to Chatfield, where both Denver and Aurora divert their municipal supplies, is already highly stressed, for there is no gentleman's agreement for minimum flows as there is between Cheesman and Strontia. Any further diversions would be even more destructive of the South Platte River between Strontia and Chatfield and downstream of Chatfield through Denver's river park system, parts of which are already dewatered, particularly the mile-long section from the Burlington canal diversion to the outflow from Denver's sewage treatment plant.	The water for the proposed storage will be available only when the water rights of each project participants are in priority and therefore legally able to store water in Chatfield in accordance with Colorado water law.	Water Rights
605	If the USACE interprets the Purpose and Need definition to be forward looking, then the analysis should require the water providers to provide both their existing portfolios, storage situation, and current demand, as well as that in 2050. Beyond that, they need to provide detailed information regarding their demand increase (residential, commercial, etc.) and where their surface water rights	Current water use, water supply sources, and demand projections are based upon the historical water use of each of the water providers in the study and include residential and commercial uses and system losses. Water supply demand analysis is provided in Chapters 1 and 2 of the report. Appendix C "Water Supply Demand Analysis" provides more detailed information regarding water supply	Water Rights

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	will come from.	demand projections. Appendix C summarizes information found in Portions of the Statewide Water Supply Initiative (SWSI) Phase I Report (Colorado Water Conservation Board, 2004) that are relevant to the Chatfield Storage Reallocation project are included in this appendix to the FR/EIS. The entire SWSI report is available online at http://cwcb.state.co.us/IWMD/Pubs.htm. Also included are selected portions of the South Metro Water Supply Study (Black & Veatch et al., 2003). The entire document is available online at http://www.crwcd.org/media/uploads/SouthMetroWaterSupplyStudy11-03.pdf	
628	How will evaporation losses be allocated between Denver Water and the Chatfield Water Providers?	The details are still being worked out but the concept is expected to be that the evaporation will be charged daily to each entity storing water in Chatfield in proportion to the amount of water in storage and based upon an evaporation calculation methodology endorsed by the State Engineers Office.	Water Rights
628	How will the storage operation by the Chatfield Water Providers in the reallocated space be coordinated with the existing Denver Water storage operation?	The storage in Chatfield by Denver Water is already part of the State Engineers Offices daily water administration procedures and documentation and that procedure will be expanded at the state desires to include both Denver Water operations and the operations of each reallocation project participant.	Water Rights
628	We are having difficulty determining the nature and magnitude of the upstream, in-reservoir and downstream impacts because we believe the described hydrology (Appendix H) does not incorporate the complex portfolio of water rights that may be stored in the reallocated space by the current project participants or the means by which that water will be released for its end use.	The state provided an analysis of the water provider's water rights to determine the storable inflows and an analysis of each provider's water demands which were included in the reservoir model to determine the impacts on reservoir levels and flows downstream.	Water Rights
628	In a drier year such as 2012 or normal year, will the reallocated space be empty or do the Chatfield Water Providers intend to store more senior or transmountain water rights that may come into priority?	Each participant will determine what water it can legally store in Chatfield at any time. It is anticipated that some legally reusable wastewater effluent may be captured and stored in Chatfield during times of water scarcity, but such possible operations are speculative.	Water Rights
628	How long will water be stored in the reallocated space by each of the Chatfield Water Providers?	The EIS depicts the estimated water levels and changes in downstream flow based on water rights considerations.	Water Rights
628	Do the Chatfield Water Providers need to use their water during the summer months?	Water for municipal supply will be used year round with higher demands in the summer months.	Water Rights

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628	How much water do the Chatfield Water Providers anticipate releasing (either downstream or through an off-channel diversion facility) on a daily, weekly and monthly basis?	The EIS depicts the estimated water levels and changes in downstream flow based on water rights considerations.	Water Rights
803	Is all the water going to irrigation? If it is municipal water supply, how does the boat exhaust affect the drinking water?	No. We did not evaluate the impacts of boat exhaust.	Water Rights
460	4.5.3, p. 4-49 - In the first paragraph, it should be pointed out that the anticipated “new reservoir effect” that could provide a positive benefit to food chain production is caused by the same decay of organic materials cited as a possible problem to maintaining water quality.	The paragraph will be revised to refer the reader to the discussions of potential water quality impacts from nutrient loading in Section 4.4 and Appendix J.	WQ
439	Alternative 3 in the report talks about algae in Chatfield and the South Platte River becoming a problem. Is this due to the fact that most of the water level would be shallow in both the lake and river and that during the summer the water would be warm enough to promote unsafe conditions for swimming and wildlife that depend on it? Is this due again to the fact that evaporation was not included as part of the report?	The conservative water quality analysis in the EIS notes that increases in total phosphorus are expected under to some degree with a reallocation, and excessive nutrients can stimulate plant growth (e.g., algae, weeds). However, the nutrient analysis also shows that there is some level of uncertainty as to how internal nutrient loading results from increased reservoir pool levels. Adaptive management would be used to address this uncertainty should the proposed Chatfield Reservoir storage reallocation project be implemented. In addition, water quality monitoring will be conducted on an on-going basis to identify any water quality impacts and evaluate their level of significance. In addition, the current condition at Chatfield is somewhat misrepresented in the EIS due to historic 2004-2009 data in used in the WQ modeling inadvertently excluded the lower 30 feet of water column depth. To correct the situation, more recently collected water quality data at Chatfield Reservoir have been reapplied in the modeling to reassess the existing condition, focusing on total phosphorus dynamics during the summer stratification period. Revisions to the water quality analysis have been made, which better characterize the current condition of Chatfield, which shows greater existing anoxic conditions exist in the lake than is represented in the DEIS.	WQ
529, 737	Chatfield Reservoir has higher than optimal phosphorus levels and has been a source of phosphorus-rich discharges that municipalities downstream have to deal with. Under the preferred Alternative, 474 (plus or minus) acres of vegetation in the reallocated space will be	The decomposition of vegetation was evaluated as part of the water quality analysis (Appendix J). Changes in temperature are addressed in Chapter 4 of the DEIS, throughout Section 4.5 Aquatic Life and Fisheries. The potential for erosion of fine sediments are	WQ

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	periodically inundated; the decomposition of vegetation on these acres can lead to lower oxygen levels in the water. In turn these can impact aquatic species in localized areas of the reservoir. Lower dissolved oxygen can also cause the methylation of mercury, which will move up the food chain to people who catch and eat the fish at Chatfield. Periodic inundation and decomposition of vegetation will also increase phosphate and ammonia loading. The inundated areas will be relatively shallow and solar radiation on these areas will increase water temperatures. Increased storage and increased fluctuations could harm aquatic species by increasing the erosion of fine sediment (Colorado State Parks, List of Anticipated Recreational and Wildlife Impacts). Here again the lack of information in the DEIS about frequency and duration of the increased water levels should the “preferred alternative” be implemented severely limits the determination of impacts.	disclosed in Chapter 4 of the DEIS, in Section 4.2 Geology and Soils, Section 4.4 Water Quality, Section 4.12 Air Quality, Section 4.19.4 Cumulative Effects to Water Quality, 4.19.5 Cumulative Effects to Aquatic Life and Fisheries, and 4.19.9 Cumulative Effects to Endangered, Threatened, and Candidate Species, Species of Special Concern and Sensitive Species. Chapter 4, Section 4.3, as well as Appendices H and I, provide detailed information about the frequency and duration of specific water levels under each of the Alternatives. The anticipated frequency of reaching 5,444' and the likely duration of those pool levels are discussed throughout the DEIS, including in Chapter 4, Section 4.3, as well as Appendices H and I. The DEIS does not claim that implementation of any of the proposed alternatives would fully satisfy the water demands for the greater Denver area. For example, DEIS Chapter 2, Section 1.6 Purpose and Need states, "The purpose and need is to increase availability of water, sustainable over the 50-year period of analysis, in the greater Denver area so that a larger proportion of existing and future (increasing) water needs can be met. The action is a component in the overall effort to meet the water supply needs of the greater Denver area, and it would contribute to meeting a portion of those needs."	
529	Should the project be approved, there needs to be a vigorous water quality monitoring program and strict provisions (including funding) for implementation including aeration should that prove necessary included in mitigation plans.	An Adaptive Management Plan has been prepared for the final FR/EIS. The plan will include recommendations for water quality monitoring, if warranted, based on uncertainties of the water quality impact evaluation.	WQ
576,	The DEIS states that internal loading (i.e. TP releases from reservoir sediments) is not currently a concern in Chatfield Reservoir because of the lack of anoxic conditions (i.e. per the DEIS definition of DO less than 2 mg/L) as supported by more than 20 years (1986 to 2007) of water quality monitoring (DEIS pp 3-19, 4-3, 4-44). However, recent post-2009 data show that DO levels regularly go below 2 mg/L.	Water quality data collected at Chatfield Reservoir by the Chatfield Watershed Authority for 2010, 2011, and 2012 were reviewed. The recent data, which provide profiles for depths up to 18 meters do indicate that Chatfield Reservoir does “regularly” stratify and a significant portion of the hypolimnion “regularly” becomes hypoxic/anoxic. Data obtained from Chatfield Watershed Authority (2004-2009 DO profile data) stop at a depth of 10 meters (~33 feet). Use of the historic 2004-2009 data in the DEIS to describe the water column water quality conditions in Chatfield Reservoir excluded the lower 30 feet of water column depth, thus leading to the misrepresentation of the current condition. To correct the situation, the recently collected water quality data at Chatfield Reservoir, that	wq

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		addresses the previous deficiency (and other data believed to be available from Colorado Parks and Wildlife) will be obtained and used to reapply the "Localized Model". The results from the reapplied model will be used to reassess the impact of the proposed Storage Reallocation Project on the water quality in Chatfield Reservoir. The model reapplication will focus on reassessing the total phosphorus (TP) dynamics during the May through September summer stratification period of Chatfield Reservoir. By utilizing the recent Chatfield water quality data the revisions to the water quality analysis will improve the overall accuracy of the water quality assessment in the FEIS, including a better characterization of the current condition, assessment of the phosphorus dynamics within Chatfield Reservoir and the possible impacts of the proposed Chatfield Storage Reallocation on water quality and attainment of promulgated water quality standards.	
576	“The regional model, EUTROMOD, used data and assumptions that may not accurately reflect conditions at Chatfield Reservoir. EUTROMOD used TP data and pre-2001 depth data, but did not include observed 2001-2007 data. EUTROMOD also used assumptions from the Midwest related to nutrients and chlorophyll dynamics which reflect different climatic and seasonal conditions and may not accurately reflect reservoir and nutrient dynamics in Colorado’s Front Range.” Regarding the EUTROMOD presentation within the FEIS, the EPA suggests that the Corps incorporate post-2001 depth data and rerun the model or run EUTROMOD without the 2001- 2007 substituted depth data to illustrate what influence the depth data substitution has on model output; and discuss how the assumptions from the Midwest may deviate from conditions in this region and relate those differences to the model predictions.	Rechow presents separate EUTROMOD models (i.e. equations) for the following two grouping of states: 1) CA, OR, WA, ID, WY, CO, NV, UT, NM, and AZ (Western Model); and 2) KA, MO, OK, AK, IA, and NE (Midwest model). Although CO is specifically included in the Western Model, that grouping of states is quite large and essentially includes most of the United States west of the Rocky Mountains. The question at hand is Chatfield Reservoir more like "alpine lakes" in the western United States or “high plains" lakes of western KS and NE. The Western Model also does not include an equation for Secchi depth whereas the Midwest Model does. The Midwest Model was selected because of the inclusion of the Secchi depth equation and the proximity of KS and NE to eastern CO versus the western states of CA, OR, and WA. Also as discussed in the DEIS, the "generic" Midwest EUTROMOD model was "calibrated" to actual Chatfield Reservoir water quality data. As such, the generic Midwest EUTROMOD model was modified to better fit the actual water quality conditions monitored at Chatfield Reservoir, and the developed Chatfield Reservoir EUTROMOD model is actually a "site-specific" model for the reservoir.	wq
576	The total maximum annual load (TMAL) for nutrients (19,600 lbs. TP at a median inflow of 100,860 AF) for Chatfield Reservoir was developed pursuant to the CWA to protect Chatfield Reservoir	A discussion of the potential effects on the TMAL has been added to Section 4.4 of the FR/EIS. Refer also to Appendix J.	wq

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	against increasing eutrophication and exceedances of standards for total phosphorus (30 ug/L) and chlorophyll a (10 ug/L). If the project causes an increase in internal loading, as predicted by the local model, revision to the TMAL (such a load and wasteload allocations) may be necessary. The EPA recommends that the FEIS describe whether this project has a potential impact that will trigger a need to revise the TMAL.		
576, 737	The FEIS should include mitigation commitments for water quality as part of the CMP, and similar to the CMP's " target environmental resources," include milestones and success criteria necessary to prevent nutrient impacts and potential WQS exceedances. Detailed plans and specifications for the mitigation activities should be prepared and included within the Record of Decision (ROD). The EPA suggests the following information be included in the plan: 1) A discussion of additional mitigation measures to address nutrient impacts, including mitigation measures that involve cooperative efforts and support for on-going (and potentially additional) nutrient reduction projects in the watershed; 2) ongoing mitigation, adaptive management or other management activities in Chatfield Reservoir targeting protection from nutrient impairment; 3) reservoir operation and management opportunities that could reduce impacts from nutrients, including additional details regarding operating scenarios to avoid water quality impacts; 4) non-operational opportunities to reduce external and internal nutrient loading through point source, nonpoint source, and/or TMAL controls; 5) Identification of thresholds associated with eutrophication, including nutrients, and chlorophyll levels that would trigger management actions early to ensure their implementation will protect water quality standards; and a description of any ongoing monitoring activities and a commitment to any additional monitoring necessary to characterize and establish pre-project baseline conditions for DO, nutrients, and chlorophyll to assure long-term protection against nutrient-related impairment.	We had discussed some initial thoughts on the feasibility of initiating the application of the CE-QUAL-W2 (QUAL2) model to Chatfield Reservoir. Once the initial QUAL2 model is developed, the Water Control and Water Quality Section (WCWQS) would facilitate, as resources allow, the annual updating of the model based on current water quality monitoring data. The WCWQS would work with the CWA and the District's Tri-Lakes Project, cooperatively, to ensure the needed water quality data are collected for annual QUAL2 updating. The QUAL2 model could be used to assess water quality conditions and facilitate scenario testing for water quality management purposes. Would be used by the Omaha District to assess water quality impacts attributable to District regulation of Chatfield Reservoir. If QUAL2 were available, it could be used as a tool for adaptive management regarding water quality facilitate assessment of possible mitigation measures. To implement the QUAL2 modeling at Chatfield Reservoir would require an initial effort to apply and calibrate the model. Once initially applied, the model would be "updated" annually based on newly collected water quality data. The model could be used on an on-going basis to assess the impact of storage management in Chatfield Reservoir on the water quality, and to identify possible management options should water quality problems arise. Initial application of the QUAL2 model will require $75,000 in funding that currently is not in the WCWQS's budget. This funding would be used to obtain technical support from the Corps' ERDC group in Vicksburg, MS to assist the WCWQS in initial application of the model to Chatfield Reservoir. Once initially applied, it is estimated $20,000 in annual funding would be required to annually update the model and assess and report water quality conditions. If the QUAL2 modeling is included as part of the Compensatory	WQ

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		Mitigation Plan (CMP) details regarding the 5 points identified by EPA can be developed as they pertain to water quality monitoring, assessment and management.	
479, 529, 578, 623	The Corps should provide a firm yield estimate or explain in detail how the proponents intend to turn an “average year yield” into a water supply that their customers can depend on in droughts. “Average year yield” is not a water supply term that urban water supplies normally use, it is not a water supply on which suppliers can depend, and it is not a water supply that allows urban utilities to sell taps. A firm supply of water (a supply that will carry a utility though a design drought) is the kind of supply utilities need and the use of “average year yield” makes the DEIS reader wonder what the project proponents really get out the proposed Chatfield Reallocation. The DEIS is inadequate in its explanation of what the reallocation’s benefits may be and how the reallocated storage will actually be used. Moreover, the DEIS is misleading in its comparison, both on the basis of cost and yield, of the reallocation with the use of NTGW. It is a comparison of the cost and yield of one option, reallocation, on an average yield basis and another option, NTGW, on a firm yield basis.	Firm yield is water that can be permanently depended upon, and NTGW is water that cannot be permanently depended on, since it is not replenished by the surface water system. The project describes "average year yield" as being the average yield that can be expected over a long period of time (the analysis used 58 years). The municipal participants in this project are also entities that have developed or are developing conjunctive use systems of both surface water and groundwater. In the years when this project does yield lesser amounts of water, those entities will use their non-tributary groundwater to provide the reliability of supply their customers expect. For these entities, a primary motivation for the project is to decrease dependence on NTGW whenever that is possible. By utilizing surface water from this project when available, it stretches out the availability of NTGW for use in droughts.	Yield
529, 537, 578	The Corps violated its duty of full disclosure by hiding and not fully discussing the project’s dependable yield of zero and the nature of the water rights of the new water storage owners. I.e. How much water will the project really supply? The standard metric for water supply planning is either “safe yield” or “firm yield” and not “average year yield” as is used in the DEIS. There are accepted methods for calculating “firm” and /or “safe” yield (not discussed in document). Unfortunately, these do not appear in the DEIS or Appendices. It is buried in App. BB. This is a very significant conclusion that has critical implications for the project and should be noted in the Executive Summary as well as key points of the DEIS and not relegated to an obscure appendix. It indicates that the project cannot guarantee reliable water supply beyond return flows already in existence (see "Chatfield Lake, Co Cost of Storage for M&I Water Supply, 2009). Full discussion of this issue is necessary. In addition, the document is inconsistent in describing the actual	The state provided an analysis the water provider’s water rights to determine the storable inflows and an analysis of each provider’s water demands which were included in the reservoir model to determine the impacts on reservoir levels and flows downstream. This analysis is documented in the report "Chatfield Reallocation Study Storage Use Patterns" dated February 2003 by Brown and Caldwell.	Yield

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	water level storage in the EIS. Due to the overall scattered organization and inconsistent information on actual water storage levels in the DEIS, an unorganized and inconsistent document leaves readers confused and unable to fully participate in the public process because they do not understand the full effects the project will have. We find it offensive that given federal deficit spending, the Corps would take it upon itself, even with clear legislative authority, to forgive 60 percent of the reallocation costs. If the users represented by the CWCB want the reallocation, then they should pay for the reallocation, for in not demanding a full return on investment, the Corps is decreasing reasonable revenues to the Treasury. Douglas County, where much of the interest in this scheme is centered, can, as one of the wealthiest counties in the USA, afford to pay their own way.		
529	The DEIS considers two types of yields (groundwater yield and surface flow yields). This is like comparing apples and oranges. The two must be differentiated and explained in a consistent manner such as "firm" or "safe" yield.	Whether the yield is from groundwater or surface water does not change the basic measure of the reliability of the yield, which is the distinction between safe yield (it is dependable at least for 3 consecutive years) or average year yield (which may or may not be available any single year).	Yield
529, 623	“Planning Objective” (2-6) states, in part, “increase availability and reliability of water supplies…” yet the Corps concludes (App. BB) the project has “low reliability” and also, “At Chatfield, all those measures of dependable yield are 0.” Violating a critical planning objective is another example of bias toward the project preferred by the water providers.	The purpose and need of the project (not a specific Planning Objective as the commenter incorrectly stated) is to increase availability and reliability of water supply. The recommended alternative achieves the purpose and need by providing the least cost, timeliest opportunity to capture available legal flows in an existing federal facility. In the context of the Corps memo in Appendix BB of the Draft FR/EIS that the commenter cited, the alternative has a very low reliability in comparison to other Corps reservoirs that have storage allocated to water supply.	Yield
112, 460, 576, 628, 786	**Agency**		
118, 124, 192, 201, 284, 314, 375, 481, 518, 584, 693, 699, 708, 718, 719, 721, 762, 770, 774-785	**Resolution of Support**		

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174	**Phone Call Comment**		
70, 78, 82, 97, 187, 226, 227, 450, 460, 576, 624, 628, 786, 788-790	**Info Request/Needs Followup**		
1, 2, 6, 106	**Request Copies of Reports**		
461, 545, 546, 551	**U.S. & State Congressional**		
9, 13 - 29, 31, 33-59, 61-65, 68, 69, 71-77, 79, 83-92, 94, 95, 98-100, 104, 108-111, 113-115, 117-119, 121-122, 124-133, 135-139, 141-143, 145-147, 149-151, 155, 156, 162-165, 167, 177-182, 184-186, 189, 191-197, 199-203, 205, 208, 209, 215, 217, 218, 220-222, 225, 228-232, 234, 237, 240, 243, 246, 250-255, 258, 260, 262, 268, 273, 274, 279, 284, 295, 296, 299, 301, 304-306, 308, 313, 314, 316, 318, 320, 328-330, 336, 338, 347, 348, 356, 357, 359, 360, 364, 375, 379, 382, 383, 388, 398, 404, 408, 422, 429, 430, 437, 441, 456, 461, 463, 465-470, 476, 479, 481,	General statement of support		

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490, 518, 520, 522, 541, 545-546, 551, 554, 555, 567, 568, 570, 573-575, 583-586, 607, 616, 627, 628, 685-735, 738-747, 756, 757, 760, 761, 763, 764, 766, 767, 772, 773, 777, 790, 793, 823, 824, 852-858, 860-863, 868, 870, 872, 877, 886, 888-903			
5, 8, 11, 32, 66, 67, 80-81, 93, 101-103, 120, 123, 134, 148, 153,154, 157-161, 166, 168-171, 175, 176, 183, 188, 198, 204, 207, 211, 212, 214, 216, 219, 223, 224, 233, 235, 238, 239, 241, 244, 245, 247, 249, 256, 257, 259, 261, 263, 265-267, 269-272, 275-278, 280-283, 285-294, 297, 298, 300, 302, 303, 307, 309 - 312, 315, 317, 319, 321-327, 331-335, 337, 339-346, 349-351, 353-355, 358, 361-363, 365-374, 376-378, 380-381, 384-387, 389-397, 400-403, 405-407,	General statement of opposition		

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409-415, 417, 420, 423-428, 431-436, 438-440, 442-444, 446-449, 451, 452-455, 457, 458, 462, 464, 471-473, 475, 477, 478, 480, 482-489, 491-496, 498-503, 505-517, 519, 521, 523-540, 542-544, 547-550, 552, 553, 557-566, 569, 572, 577-582, 586, 589-599, 601-606, 608-615, 617-623, 626, 629-632, 634, 635, 638-644, 646-676, 737, 759, 794-813, 816-822, 825-851, 865-867, 869, 873, 874, 879-885			
10, 659	**Add to Distribution List**		
30, 107, 116, 140, 152, 210, 236, 264, 352, 399, 416, 418, 419, 421, 459, 474, 625, 633, 871, 875, 876	**Neutral Comment**		
3, 4, 7, 12, 52, 60, 96, 105, 159, 172, 173, 190, 242, 248, 302, 340, 381, 445, 453, 486, 500, 510, 524, 526, 537, 545, 546, 551, 594, 602, 614, 660, 671, 677, 678,	**Extension Request**	Review time was extended 30 days to September 8th.	

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679, 680, 681, 682, 683, 684, 663, 736, 748, 749, 750, 751, 752, 753, 754, 755, 758, 765, 768, 769, 771, 789, 814, 859, 864, 866, 878, 882, 885, 887			
	WILDLIFE		
	RECREATION		
	MITIGATION SUFFICIENCY		
	OTHER ALTERNATIVES NOT SUFFICIENTLY CONSIDERED		
	PLANNING PROCESS		
	WATER AVAILABILITY		
	WATER QUALITY		
	HYDROLOGY/HYDRAULICS - DOWNSTREAM FLOW		
	ECONOMICS		
76, 192	Project does not require additional tax dollars.	Comment noted.	
	OTHER AUTHORIZED PURPOSES		
	SAFETY		
	PENLEY		
	SPECIFIC QUESTIONS/COMMENTS		
	SPECIFIC EDITORIAL/ AND REPORT COMMENTS		
529	One of the “Planning Objectives” is “Become less reliant on non-renewable ground water by utilizing renewable water supplies, thus extending the availability and life of these critical aquifers for use by future generations.” In order to achieve this commendable planning objective, should the Corps approve the reallocation, it is essential	The CWCB’s “Statewide Water Supply Initiative” (SWSI) includes several “Identified Projects and Processes” (IPPs), including the Chatfield Reallocation Project, to meet the needs of the Denver metro area. Even with the IPPs, it is expected that a significant gap in water supply availability would remain (potentially 262,700 to	

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	that there be a legally-binding agreement between either the water providers and the Corps, or the water providers and Colorado DNR that the providers would, in fact, reduce ground water pumping in an amount equal to water they derive from Chatfield storage. Absent such an agreement, Chatfield storage would simply be used for additional growth with no reduction in ground water pumping.	435,000 acre-feet) due to increases in population of the region. This study focuses on providing a component in the overall effort to meet the water supply needs of the greater Denver area that are driven by growth. The study does not aim to limit growth, or establish arrangements that would require that water derived from Chatfield provide a full replacement of NTGW usage. Chatfield, in combination with other needed water supply projects, will help lessen the dependency on NTGW and sustain these critical aquifers for use of future generations.	
666	Converted or enhanced habitat must be situated in such a way as to avoid creating isolated patches of little ecological significance (i.e., mitigation areas should be placed as close together as possible). Also, mitigation should be allowed as much time as possible to take effect before habitat loss occurs.	The CMP (Appendix K of the FR/EIS) addresses this potential issue by creating incentives to acquire and protect off-site mitigation areas in a way that will provide connected and buffered aquatic and wildlife habitat corridors in the Chatfield Reservoir watershed. Weighting factors are designed to encourage mitigation to take place in an ecologically-based context (greater benefits for connected habitats with buffers that protect habitat and streams, etc.). Weighting factors presented in the CMP were made in consultation with FWS and are presented in the revised Biological Assessment and CMP in the final FR/EIS.	
740	Additional storage is very important for less senior water rights.	Comment noted.	
3, 676, 663, 758, 866	The DEIS acknowledges that riparian corridor habitat provides crucial stopover habitat for birds during migration and nesting areas for many breeding birds (Draft EIS pages 3-47 through 3-49). The proposed Chatfield Reservoir Storage Reallocation would destroy this crucial stopover habitat, and the stopover habitat will not be replaced within our lifetime, if ever. - According to the DEIS, the Chatfield riparian areas have the largest populations of breeding American Redstarts and Least Flycatchers in Colorado (Draft EIS page 3-49). This will be lost, and not replaced under the proposed mitigation plan. - According to the DEIS, Chatfield area contains rare or unique habitat that holds important species or species assemblages largely restricted to a distinctive habitat type (Draft EIS page 3-50). This will be lost, and not replaced under the proposed mitigation plan. - According to the DEIS, significant numbers of birds concentrate for breeding during migration or in winter (Draft EIS page 3-50). This will be lost, and not replaced under the	Wetland and riparian impacts will be mitigated. Refer to the CMP for more details.	

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	proposed mitigation plan. - According to the DEIS, the Chatfield site is important for long-term research and/or monitoring projects that contribute substantially to ornithology, bird conservation and/or education (Draft EIS page 3-50). This will be lost, and not replaced under the proposed mitigation plan.		
676	According to the DEIS, Chatfield is important to endangered or threatened species in Colorado (Draft EIS pages 3-49 & 3-50). This will be lost, and not replaced under the proposed mitigation plan.	The Corps is consulting with the USFWS under Section 7 of ESA on effects to federally listed species and their designated critical habitat. The USFWS will issue its Biological Opinion that will include conservation measures that address impacts to federally listed species and their designated critical habitat. These conservation measures will be incorporated into enforceable contract terms and conditions.	
693	The Arkansas Basin Roundtable recognizes that renewable water supplies for some South Platte water users are derived from the Arkansas River Basin, and therefore, providing additional storage via the Chatfield Reallocation Project is aligned with the projects and methods the Arkansas Basin Roundtable has identified for meeting the Front Range water supply gap.	Comment noted.	
713	A collateral consequence of becoming aware of your project is the idea that we may be able to capture and use decreed water that has been leaving Elbert County during the winter and spring. That concept could be incorporated into the Elbert County Water Master Plan that the Elbert County Water Task Force is initiating. There are many low priority agriculture water decrees that, through Change of Use applications, could utilize wasted water for a variety of uses.	Comment Noted.	
716	The Chatfield Authority has monitored water quality for many years, and has experience in mitigating water quality impacts. The Chatfield Authority's water quality data was used for modeling to project potential water quality impacts associated with the Chatfield Reallocation. Although the Chatfield Authority suggested clarifications and modeling calibrations for early versions of the Chatfield model, we are satisfied that the modeling reflected in the DEIS frames the potential water quality impacts. It notes that the potential impacts from the Chatfield Reallocation are generally short term, especially nutrient impacts which could be mitigated by the Chatfield Reallocation's proposal to clear vegetation along the	Water Quality analysis is being updated.	

Commentor Number	Comment	Response	Category
	shoreline prior to inundation. Should water quality impacts occur, they will be addressed by the Chatfield Reallocation through its adaptive management plan.		
722	The Chatfield Reallocation Project has positive environmental effects to fisheries by increased habitat structure for use by fish and other aquatic life. The increased shore inundation will enhance productivity at virtually every trophic level in the aquatic food web.	Comment noted.	
737	Massive loss of shoreline fauna and associated loss of habitat for birds, amphibians, and mammals. The proposed re-vegetation plans are subject to failure due to shoreline fluctuations and possible funding uncertainties; and even if successful would take decades to replace current conditions, especially on the southwest and south sides of the reservoirs.	The impacts analysis took the conservative approach that all existing vegetation and habitat will be lost below the new high water elevation of 5,444 feet msl. As discussed in the Adaptive Management Plan (Appendix GG of the final FR/EIS), this maximum estimated impact may or may not occur and will be addressed through monitoring and adjustments to mitigation as needed. The Adaptive Management Plan also addresses the potential for weeds within the fluctuation zone. Additional information on the fluctuation zone is provided as part of the final FR/EIS (Appendix HH). A comparative review of the fluctuation zones of reservoirs in the region provides some insights as to the likely characteristics of the fluctuation zone within the reallocated storage elevations at Chatfield Reservoir.	
744	Do not support Alternative 1, 2 or 4. Alternatives 1 and 2 do not improve the reservoir's capacity; alternative 4 improves capacity but not significantly to warrant the disruption and expense. Alternative 3 will have the largest impact on water storage.	Comment noted.	
688	In numerous places in the document, the volume of 10,785 acre-feet is referred to as the volume between elevations 5,423 and 5,432 feet msl. This is the volume between these elevations as specified in the April 3, 1979 agreement between Denver Water and the State of Colorado. The volume between these two elevations as determined by the most recent survey (1998) by the U.S. Army Corps of Engineers is 11,134 acre-feet. This volume could again change in the future if another survey is undertaken. Denver Water will still, as it has historically, be bound by the two agreements specified above with regard to its operations between elevations 5,423 and 5,432 feet msl. Furthermore, the document refers to "water storage rights of 10,785 acre-feet" (p. 1-9). This is erroneous as the volume of	The contract between the COE and State of Colorado allocates storage space in the permanent pool which may fluctuate between 5,432 feet above mean sea level (msl) and 5,423 feet above msl. The contract between the state and Denver Water references the same. The specific reference to 10,785 acre feet is not specified in the contracts and will be removed and replaced with "storage space between elevation 5432 msl and 5,423 msl.	

Commentor Number	Comment	Response	Category
	Denver Water's storage rights in Chatfield Reservoir is 55,000 acre-feet (Decree in Case No. W-8783-77). Denver Water requests that any reference to the outdated value of 10,785 acre-feet as the volume between these two elevations be replaced with reference to the "storage volume between elevations 5,423 and 5,432 feet msl."		
688	In numerous places in the document, the elevation of 5,426.94 feet msl is associated with a storage volume of 20,000 acre-feet. The storage volume of 20,000 acre-feet is the May 1-August 31 minimum storage level goal as specified in the April 3, 1979 agreement between Denver Water and the State of Colorado. The operative goal as emphasized in this agreement and as honored by Denver Water is the storage of 20,000 acre-feet. The most recent survey (1998) by the U.S. Army Corps of Engineers indicates that the elevation at this storage level is 5,426.32 feet msl. The elevation associated with 20,000 acre-feet could again change in the future if another survey is undertaken, but Denver Water will still, as it has historically, be bound by the April 3, 1979 agreement with regard to the goal of 20,000 acre-feet during the May 1-August 31 period. Denver Water requests that references to the elevation 5426.94 feet msl be replaced with a reference to the "minimum storage level goal of 20,000 acre-feet."	The elevation of 5426.94 associated with a storage volume of 20,000 acre-feet is based on surveys and subject to change. The current survey indicates 20,000 acres feet of storage is associated with 5,426.49. Denver Water is required and has demonstrated a commitment to operate as nearly as practicable to the end that at least 20,000 acre feet is in storage during May1-August 31 of each year. The importance is the minimum storage level to provide 20,000 acre feet of storage which does not vary regardless of elevation fluctuation. The document will be revised where reference to the elevation 5426.94 feet msl is mentioned by deleting the elevation and replacing it with "the minimum storage level.	
688	On page 4-144 in section 4.19.1.1 the document discusses the "Chatfield Reservoir Drought Drawdown" a proposal by Denver Water to pump water from the pool in Chatfield below elevation 5,423 feet, msl. The document specifies that this project would draw down the reservoir at specific rates, for example "100 acre-feet per day" and "20 acre-feet per day via the Chatfield ditches." I would like to request that the sentence beginning with "The pump station would cause ... " be removed. The scope of this project is too ill-defined and no approvals have been obtained, so operational details may not be at all representative of how this project would be operated, if it is constructed.	Because this project is conceptual, not approved nor agreed upon between parties involved, the requested sentence with specific rates documented will be removed. It is premature to provide operational details. Reference to the fact that pumping would allow use of water in the drought pool between 5,423 and 5,385 feet msl will remain followed by a statement documenting that the drought drawdown proposal is conceptual and not approved.	
688	In the first full paragraph on page 2-8 of the draft FR/EIS, please change the second sentence to read: "In 1977, Denver Water filed for a conditional water right that included reallocated storage space ... "	Comment noted. The report will be revised to reflect Denver Water filed for a conditional water right that included reallocated storage space in Chatfield Reservoir.	

ED PERLMUTTER
7TH DISTRICT, COLORADO

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COMMITTEES:
FINANCIAL SERVICES
CAPITAL MARKETS AND
GOVERNMENT SPONSORED ENTERPRISES (GSEs)

INTERNATIONAL MONETARY POLICY AND TRADE

Congress of the United States
House of Representatives

June 25, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

I am writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers determined Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond what is currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project was prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study is supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating additional storage space to entities holding current water rights will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

I support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct this letter to be delivered to the U. S. Army Corps of Engineers as part of the record of public comments on this draft FR/EIS.

While I support the EIS, I want to make note my office was contacted by the Audubon Society who expressed concerns surrounding mitigation efforts and the timeframe in which they were given to provide feedback and comment. They want to have additional time to review the EIS before giving their final comment, as well as more time for community outreach efforts to the users of Chatfield Reservoir. Given their concerns, I believe this is a reasonable request, and I ask you to consider their request for additional time, and offer an extension of the comment period.

In addition, I urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Ed Perlmutter (CO-07)
Member of Congress

MIKE COFFMAN
6TH DISTRICT, COLORADO

ARMED SERVICES COMMITTEE

NATURAL RESOURCES COMMITTEE

SMALL BUSINESS COMMITTEE

BALANCED BUDGET
AMENDMENT CAUCUS
CHAIRMAN

Congress of the United States
House of Representatives
Washington, DC 20515–0606

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DISTRICT OFFICE:
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LONE TREE, CO 80124
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06/22/2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

I am writing you to offer my support for the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. I believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. I believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

I support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, I urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely,

Mike Coffman (CO-06)

United States Senate

WASHINGTON, DC 20510

September 6, 2012

Gwyn Jarrett
U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

We are writing in regards to the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the draft Integrated Feasibility Report (FR) and Environmental Impact Statement (EIS) released for public comment on June 8, 2012. Colorado faces many water supply challenges in the coming years, and the Chatfield Reservoir Storage Reallocation Project proposes one solution to these challenges for the Front Range and northeastern Colorado water providers.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 acre-feet per year in the South Platte River Basin over the next 40 years. To fill this gap, Colorado must pursue every opportunity to make better use of the water we have, including aggressively implementing conservation and reuse efforts, which many water providers throughout the South Platte River Basin already do.

The U. S. Army Corps of Engineers has prepared a draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. It has determined that Chatfield Reservoir can safely store an additional 20,600 acre-feet of water beyond what is currently held, without jeopardizing the reservoir's flood control purposes. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for the modification of recreation facilities as needed.

The Chatfield Reservoir Storage Reallocation Project has broad stakeholder support throughout Colorado due to the many benefits it offers over other possible water supply projects. It will make use of an existing water storage facility and does not require any significant new infrastructure development. Located in the path of the South Platte River, Chatfield Reservoir will efficiently capture additional runoff flowing down the South Platte River and Plum Creek without the need to pump water. In addition, reallocation of water in Chatfield Reservoir will prevent the loss of as much as 20,600 acre-feet of South Platte River water in wet years to out-of-state flows.

We have been encouraged by the open and inclusive process the U.S. Army Corps of Engineers has used to develop the draft FR/EIS. Working with the State of Colorado through the Colorado Water Conservation Board, the Corps held many public meetings throughout the development of the FR/EIS. The Corps also worked closely with over thirty Cooperating Agencies and Special Technical Advisors that were given the opportunity to review and comment on the Preliminary Draft chapters of the FR/EIS. We also commend the Corps on its decision to extend the public comment period by 30 days to allow time for even greater public participation.

At the same time, we recognize that there remain outstanding concerns with the preferred alternative, including mitigation of the environmental impacts. The draft FR/EIS includes a draft Compensatory Mitigation Plan (CMP) to address such concerns. Effective implementation of the CMP will be a critical component of the project going forward. We encourage the Corps and project participants to continue to work with interested project stakeholders to address the remaining environmental concerns, enhance the recreational experience and help provide ecological benefits worthy of the State's most visited state park.

We urge the U. S. Army Corps of Engineers to complete its final review of the project in a timely manner – consistent with all applicable laws and regulations – so that stakeholders can adequately plan for their future water needs. Thank you for your consideration.

Sincerely,

Mark Udall
U.S. Senator

Michael F. Bennet
U.S. Senator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
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Ref: 8EPR-N

SEP 06 2012

Gwyn M. Jarrett, Project Manager
Department of the Army
Corps of Engineers, Omaha District
CENWO-PM-AA
Attn: Chatfield Reservoir Storage Reallocation FR/EIS
1616 Capital Avenue
Omaha, Nebraska 68102-4901

Re: EPA Comments on the
Chatfield Reservoir Storage Reallocation
Draft Integrated Feasibility Report and
Environmental Impact Statement
CEQ # 20120191

Dear Ms. Jarrett:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the U.S. Corps of Engineers (Corps) Draft Integrated Feasibility Report and Environmental Impact Statement (DEIS) for the Chatfield Reservoir Storage Reallocation project. Our review was conducted in accordance with EPA's responsibilities under section 102 of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2)(c), and Section 309 of the Clean Air Act, 42 U.S.C. § 7609. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major federal agency action. EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

Background

The purpose of the Chatfield Reservoir Storage Reallocation project is to sustainably increase availability of water in the greater Denver area so that a larger proportion of existing and future water needs can be met while lessening the dependence on non-tributary groundwater. The Colorado Water Conservation Board (CWCB), on behalf of a group of 15 water providers and other water rights holders (Providers) in the Denver metropolitan area, has proposed reallocating space within Chatfield Reservoir for water supply. Chatfield Reservoir is located southwest of Denver in Chatfield State Park, at the confluence of the South Platte River and Plum Creek within the South Platte River Basin.

The DEIS evaluates four alternatives including the No Action alternative (Alternative 1). Alternative 1 assumes that the water providers would use a newly constructed Penley Reservoir and gravel pit storage to meet future water storage needs. Alternative 2 utilizes non-tributary groundwater (NTGW) for use by upstream water providers combined with gravel pit storage for downstream providers. Alternative 3 and Alternative 4 propose reallocating storage from flood control to primarily municipal and industrial

(M&I) water supply. Alternative 3 is the proposed project and the Corps' Preferred Alternative. This alternative would allow an additional 20,600 acre-feet of water supply storage and raise the base elevation of the flood control pool in the reservoir from 5,432 to 5,444 feet above mean sea level (msl). Alternative 4 would allow an additional 7,700 acre-feet of water supply storage and raise the base elevation of the flood control pool to 5,437 feet msl. Additional water supply sources of NTGW and downstream gravel pit storage are also included in Alternative 4 to supply an additional 839 acre-feet.

The Preferred Alternative involves reallocating existing flood control storage and re-designating it to joint flood control and conservation for water supply, thus increasing the volume of available water from Plum Creek and the South Platte River and decreasing dependence on groundwater sources. Water level fluctuations could increase both in magnitude and frequency (pool elevations could fluctuate up to 21 feet based on historic low elevation and maximum elevation of the Preferred Alternative). The operation of the reservoir and the resulting water levels are dependent upon numerous factors, including flow conditions upstream and downstream, the priority of water rights of downstream water providers, requests for release of stored water, precipitation and evaporation. The DEIS acknowledges that water level fluctuations and other changes to the operation of the reservoir under the Preferred Alternative will cause environmental impacts, and may impact existing recreational uses provided by the reservoir and the adjacent lands.

EPA Comments

The EPA appreciates that the Corps, the Providers and the CWCB have included the EPA in their project discussions during the planning process. The DEIS reflects the substantial research and analyses that have been conducted to identify impacts and provide a plan to reduce undesirable effects. After review of the DEIS and its analysis of the Preferred Alternative, the EPA has the following principal concerns: 1) potential water quality impacts to Chatfield Reservoir and the South Platte River; 2) use of water quality data and modeling analyses; and 3) incomplete commitments to water quality-related mitigation, adaptive management and monitoring. We have provided recommendations regarding mitigation and have also provided technical comments for your consideration.

Water Quality

The EPA is concerned that the DEIS discloses that the Preferred Alternative could cause exceedances of water quality standards (WQS) for total phosphorus (TP) in Chatfield Reservoir, but does not provide a thorough plan to ensure that those potential impacts will be avoided or mitigated. We are also concerned that the DEIS does not analyze the Preferred Alternative's impacts to impaired water bodies, total maximum daily loads (TMDLs), and permitted dischargers in the South Platte River from the anticipated reduced flow in the segments immediately downstream of Chatfield Reservoir. These segments are on the Clean Water Act (CWA) Section 303(d) list of impaired water bodies and have established TMDLs. An increase in concentrations from reduced flows could cause or contribute to exceedances of the applicable WQS or affect the loading requirements specified in the current TMDLs. The FEIS should identify effective mitigation measures and/or adaptive management actions that will be implemented as part of the Preferred Alternative to either avoid or reduce the impacts and ensure that the project does not cause exceedances of WQS at either Chatfield Reservoir or the South Platte River. The following comments detail our concerns.

Chatfield Reservoir: Potential for Nutrient Standard Exceedances

The DEIS presents the results of two models to characterize potential nutrient impacts to Chatfield Reservoir from the project, a "local model" and a "regional model." The models predict inconsistent nutrient impacts as a result of implementation of the Preferred Alternative. The local model predicts exceedances of both the TP water quality standard of 30 µg/L and the associated assessment criterion of 35 µg/L, as depicted in the table below.[1] Conversely, the regional model predicted minimal nutrient changes, and even a slight decrease in chlorophyll concentrations (which can be directly related to TP concentrations).

Table 1. Local model predicted TP concentrations.

	Condition	Modeled Summer TP, µg/L	TP standard, µg/L	TP assessment criterion, µg/L
Baseline	Hypolimnion of 1 m	35	30	35
	No hypolimnion	18		
Maximum condition (12 ft increase in hypolimnion)	Short-term	71		
	Long-term	55		
Average condition (9.3 ft increase in hypolimnion)	Short-term	66		
	Long-term	50		
Minimum condition (no hypolimnion)	Short-term	37		
	Long-term	20		

Local Model

The local model is likely to be a better predictor of nutrient conditions, because unlike the regional model, the local model uses Chatfield-specific data to describe nutrient dynamics, considers low oxygen conditions, includes contributions from inundated soil and vegetation, and factors in lake stratification. As such, we do not understand the DEIS's assertion that the nutrient impacts as predicted by the local model are unlikely and offer recommendations to more fully characterize and clarify potential water quality impairments.

The DEIS states that internal loading (*i.e.* TP releases from reservoir sediments) is not currently a concern in Chatfield Reservoir because of the lack of anoxic conditions (*i.e.* per the DEIS definition of dissolved oxygen (DO) less than 2.0 mg/L) as supported by more than 20 years (1986 to 2007) of water quality monitoring (DEIS pp. 3-19, 4-3, 4-44). However, recent post-2009[2] data show that DO levels

[1] The DEIS did not identify a long-term TP concentration for the minimum (no hypolimnion) condition, but the EPA has used the 0.416 conversion factor to approximate this value from that provided in terms of orthophosphorus in Appendix J.
[2] These data are available at http://www.chatfieldwatershedauthority.org/reports.html

regularly go below 2.0 mg/L, which appear more consistent with the local model's predictions of TP concentrations. Anoxic conditions can contribute to internal loading by causing the release of stored phosphorous from reservoir sediments. Additionally, the DEIS does not identify the frequency with which the projected exceedances are predicted to occur. This is important because the TP WQS allows the standard to be exceeded once within any five year period. As a result, it is unclear whether or not the predicted model results represent attainment of the phosphorus WQS.

The EPA has the following recommendations to clarify the analysis of the project's impacts on TP and ammonia-nitrogen:

- Incorporate post 2009 water quality data into the nutrient modeling and/or include this information in the FEIS discussion and disclose any potential implications associated with internal loading and the TP water quality standard;
- Include a discussion of any reservoir operations/management changes since 2009 that could have led to the recent anoxic conditions;
- Present the recent development of anoxic conditions in the "Trends" section of Appendix J;
- Clarify whether the baseline TP conditions presented in the DEIS are modeled, and if this is the case, include the averages of recent July-September TP observed data (*i.e.* 2007-2011) in the FEIS to give a sense of the model's predictive capabilities and assist in characterizing the baseline;
- Characterize expected frequency of the predicted model results in order to better understand how often concentrations will be higher than the TP standard; and
- Explain why the local model's predicted nutrient concentrations are described as instantaneous maxima (Appendix J, pp. 35, 37, 41, 44). This appears to be inconsistent with the data and steady state approach used to develop the model and is not typically used to assess nutrient concentrations.

Regional Model

The regional model, EUTROMOD, used data and assumptions that may not accurately reflect conditions at Chatfield Reservoir. EUTROMOD used TP data and pre-2001depth data, but did not include observed 2001-2007 data. EUTROMOD also used assumptions from the Midwest related to nutrients and chlorophyll dynamics which reflect different climatic and seasonal conditions and may not accurately reflect reservoir and nutrient dynamics in Colorado's Front Range.

EUTROMOD did not use actual depth data for the years 2001 to 2007, but assumed the mean of the 1942 to 2000 depth data as a substitution. The substitution has important implications because it is used to calculate hydraulic residence time (HRT). HRT is a very large, if not primary, driver of the model because the key eutrophication parameters are sensitive to the HRT. Based on the EUTROMOD results, the DEIS concludes that goals for addressing potential water quality issues could be achieved with proper management of the volumes and outflow for the reservoir. However, the DEIS also indicates that, under the Preferred Alternative, operating the reservoir to control flows may not be implementable given the timing and objectives of water uses (p. 4-44).

Regarding the EUTROMOD presentation within the FEIS, the EPA has the following suggestions:

- Incorporate post-2001 depth data and rerun the model or run EUTROMOD without the 2001-2007 substituted depth data to illustrate what influence the depth data substitution has on model output; and
- Discuss how the assumptions from the Midwest may deviate from conditions in this region and relate those differences to the model predictions.

Chatfield Reservoir: TMAL

The total maximum annual load (TMAL) for nutrients (19,600 lbs TP at a median inflow of 100,860 AF) for Chatfield Reservoir was developed pursuant to the CWA to protect Chatfield Reservoir against increasing eutrophication and exceedances of standards for total phosphorus (30 µg/L) and chlorophyll *a* (10 µg/L). If the Project causes an increase in internal loading, as predicted by the local model, revision to the TMAL (such as load and wasteload allocations) may be necessary.

- The EPA recommends that the FEIS describe whether this project has a potential impact that will trigger a need to revise the TMAL.

South Platte River: Water Quality Impairments, TMDLs, & Dischargers

The DEIS does not analyze how decreased outflows from Chatfield Reservoir into the South Platte River from the Project may affect existing water quality impairments, TMDL loads, or permitted dischargers. Flow reduction may decrease the South Platte's assimilative capacity. The EPA is concerned that an increase in concentrations could exacerbate existing impairments or necessitate a change to the loading requirements specified in TMDLs.

Two segments of the South Platte downstream of Chatfield Reservoir are identified on Colorado's list of impaired waterbodies for *Escherichia coli (E. coli)* and arsenic pursuant to Section 303(d) of the CWA. Four TMDLs for *E. coli*, nitrate, DO, and cadmium have also been completed for these segments. The DEIS concludes that the Project will have no effect on *E. coli* concentrations or the TMDL for *E. coli* because it is not a source of *E. coli* (p. 4-45). This conclusion should be further supported and explained because flow reductions from the Project could reduce the quantity of relatively low pollutant water available for dilution of *E. coli* or other pollutants for which water quality impairments or TMDLs exist.

While the DEIS acknowledges that monthly flow reductions up to an estimated 7% (based on Figure 4-12, p. 4-51) are projected at the Denver gage approximately 15 miles downstream of the dam and also downstream of the confluence with a major tributary (Cherry Creek), potential effects on the river segment immediately downstream of the reservoir are not presented.

The EPA has the following recommendations for the FEIS to strengthen the analysis of impacts to the South Platte River and address the concerns noted above:

- Discuss when and where the Project will affect downstream flows and whether it is expected to lead to an increase in pollutant concentration through a reduction of flow. It is important to consider flows on a fine enough scale to detect changes (such as monthly) and across a range of flow conditions (dry, wet, average). If the hydrologic model cannot predict flows in the reach from Chatfield Reservoir to the Denver Gage, outflows from Chatfield may be surrogates;

- Assess whether flows are affected at the locations where water quality impairments, TMDLs, or permitted dischargers occur. If these flows are affected, discuss potential impacts on these impaired water body segments and the TMDLs; and
- Identify permitted dischargers downstream of Chatfield Reservoir where permits may be affected due to changes in flow conditions.

Mitigation, Adaptive Management, and Monitoring

Water Quality

The EPA acknowledges that Chatfield is a complex and variable system, and there is associated uncertainty with respect to the relationships between and among nutrient dynamics, water availability and reservoir operations. This uncertainty emphasizes the importance of the commitment to a thorough adaptive management plan, with mitigation measures and monitoring to assure that nutrient levels are maintained to achieve the WQS. Although the DEIS states that the Providers and the Corps intend to create and implement a strong adaptive management strategy involving active monitoring and mitigation adjustments based on "actual conditions," these details are not included in the DEIS.

The EPA is concerned that potential nutrient impacts are not addressed as part of the Compensatory Mitigation Plan (CMP). Inclusion of nutrient impacts is critical so that these impacts are provided the same consideration as other impacts.

With respect to water quality, Table 4-1 identifies three "required adaptive management" activities to address potential impacts and uncertainty: 1) removal of terrestrial vegetation prior to inundation, 2) aeration/mixing of the reservoir to limit stratification and anaerobic conditions, and 3) altered management of inflows and outflows to manage flushing and HRT. While each of these activities has the potential to mitigate impacts to DO and nutrients, their ability to fully offset these impacts is uncertain due to the lack of details offered in the DEIS. Flow management most directly addresses what appears to be the root cause of the predicted long-term nutrient and DO issues in Chatfield, given the influence of HRT and outflows on both the regional and local nutrient models.

We recommend the FEIS include mitigation commitments for water quality as part of the CMP, and similar to the CMP's "target environmental resources," include milestones and success criteria necessary to prevent nutrient impacts and potential WQS exceedances. Detailed plans and specifications for the mitigation activities should be prepared and included within the Record of Decision (ROD). The EPA suggests the following information be included in the plan:

Mitigation and Adaptive Management Recommendations

- A discussion of additional mitigation measures to address nutrient impacts, including:
    - mitigation measures that involve cooperative efforts and support for on-going (and potentially additional) nutrient reduction projects in the watershed;
    - ongoing mitigation, adaptive management or other management activities in Chatfield Reservoir targeting protection from nutrient impairment;
    - reservoir operation and management opportunities that could reduce impacts from nutrients. We recommend the FEIS include additional details regarding operating scenarios, including both a discussion of any limitations and the potential opportunities for overcoming them to avoid water quality impacts. It would be important to identify

any potential indirect environmental impacts elsewhere in the system associated with such scenarios;

- non-operational opportunities to reduce external and internal nutrient loading through point source, nonpoint source, and/or TMAL controls; and

- Identification of thresholds associated with eutrophication, including DO, nutrients, and chlorophyll levels that would trigger management actions early to ensure their implementation will protect water quality standards.

Monitoring Recommendation

- A description of any ongoing monitoring activities and a commitment to any additional monitoring necessary to characterize and establish pre-project baseline conditions for DO, nutrients, and chlorophyll to assure long-term protection against nutrient-related impairment.

General Recommendations for Mitigation

In addition to the water quality mitigation recommendations outlined above, we recommend further description of a number of the mitigation provisions/agreements described in the DEIS. In order to ensure effective development and implementation of the overall mitigation for the Preferred Alternative, we suggest these elements of mitigation be described and included in the CMP. Specific references in the DEIS are provided below along with recommendations:

- Include details of the adaptive management approach and the Coordinated Reservoir Operations Plan provisions to be developed to protect the walleye brood stock program (page 4-56);
- Include mitigation measures (to be developed in coordination with CDOW) to fund stream habitat improvements in the South Platte River upstream and downstream from Chatfield Reservoir (page 4-56);
- Consider mitigation provisions to address the potential aquatic life impacts of flow changes to the South Platte River downstream of Chatfield Reservoir. The Draft Ecosystem Restoration Evaluation Report (Great Western Institute et al., 2007; Appendix D) evaluated opportunities to protect and enhance fishery habitat through management of future water releases. The study found that alternative release patterns from the reallocated storage to address base flow conditions during the winter months (a critical aquatic stressor) can dramatically improve conditions; and
- Consider increasing the compensation for loss of mature cottonwoods above the proposed 1:1 acreage. In EPA's experience across the country and in the scientific supporting literature, offsetting functional loss has a time lag and is not always successful: restoration efforts often face a high failure rate. These lessons seem particularly pertinent to replacing mature (30+ year old) cottonwoods. Enhanced mitigation recommendations for this type of resource generally include a replacement ratio in the range 1:5 to 1:15.

Given the critical role of the CMP and the implementation details, including monitoring and adaptive management, the EPA is interested in participating in the process through representation on the Technical Advisory Committee.

Other Considerations

Climate Change

The DEIS does not include a discussion of the potential impacts of climate change on the Project, and concludes that climate variability cannot be accurately predicted at this time. However, information is available that should be included in the FEIS to ensure disclosure of possible impacts. The EPA recommends that the FEIS reference relevant local research on potential climate change impacts, such as the Joint Front Range Climate Change Vulnerability Study, which combines the results of the latest climate science with available hydrologic simulation capabilities to better understand future streamflow trends. Regional research projects that air temperatures will warm, leading to earlier and slightly reduced runoff. We suggest that the FEIS consider and discuss what impact an increase in temperature and/or decrease in flows would have on the Project, especially in relationship to how changes in hydrology could affect reservoir operations and project objectives. The EPA recommends review of the Arkansas Valley Conduit Draft Environmental Impact Statement, which is available online at www.usbr.gov/avceis. In this DEIS, various runoff projections representing different climate change scenarios were converted to streamflow and, in part, used to investigate the ability to meet water demands in the future.

Chatfield Reservoir: E. coli.

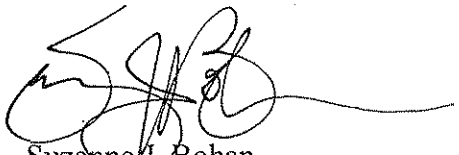
The *E. coli* water quality standard of 126 colonies/100 mL is a two-month geometric mean. Section 5 of Appendix J presents monthly maximum data and compares them to the water quality standard. While these monthly data are useful information, they are not the correct basis for comparison to the standard. We suggest using two-month geometric means of *E. coli* for comparison to the water quality standard of 126 colonies/100 mL.

Conclusion

Based on our review, and in accordance with the enclosed rating criteria, the EPA has rated the DEIS as "Environmental Concerns – Insufficient Information" ("EC-2"). The EC rating indicates that the EPA's review has identified potential water quality impacts to Chatfield Reservoir and the South Platte River that should be avoided in order to adequately protect the environment. Corrective measures may require changes to the Preferred Alternative or application of mitigation measures that can reduce the environmental impact. We also recommend additional analysis and information to fully assess and mitigate all potential impacts of the management actions. The EPA is committed to working with you in the coming months to better characterize the nutrient and flow-related issues, and identify potential measures to avoid, minimize or reduce impacts, before issuance of the FEIS and the ROD.

We appreciate the opportunity to participate in the review of this project. If we may provide further explanation of our comments during this stage of your planning process, please contact me at 303-312-6925, or your staff may contact Melanie Wasco, Lead NEPA Reviewer, at 303-312-6540.

Sincerely,



Suzanne J. Bohan
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure: Ratings Criteria

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new, reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

United States Department of the Interior

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Denver Federal Center, Building 67, Room 118
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Denver, Colorado 80225-0007

TAKE PRIDE IN AMERICA

September 5, 2012

9043.1
ER-12/0434

Ms. Gwyn M. Jarrett, Project Manager
CENWO-PM-AA
ATTN: Chatfield Reservoir Reallocation Draft FR/EIS
1616 Capitol Avenue
Omaha, NE 68102

Dear Ms. Jarrett:

The Department of the Interior has reviewed the Draft Integrated Feasibility Report and Environmental Impact Statement" (Draft FR/EIS) dated June 2012, for the Chatfield Reservoir Storage Reallocation, and offers the following comments provided by the U.S. Fish and Wildlife Service (USFWS) and U.S. Geological Survey (USGS).

U.S. Fish and Wildlife Service Comments

The Draft FR/EIS and supporting appendices are extensive and staffing limitations prevented a thorough review by the USFWS of all aspects of these documents. We provide comments primarily on the preferred alternative, Alternative 3, reallocating 20,600 acre-feet of storage in Chatfield Reservoir and raising the pool level to 5,444 feet. Alternative 3 would result in the greatest onsite impacts of those alternatives addressed. Our review emphasizes aspects of the project that would impact existing fish and wildlife resources, and the proposed mitigation to offset those impacts. We will largely rely on the Colorado Division of Parks and Wildlife (CPW) for review and comment on portions of the document pertaining to water quality (including potential concerns related to sediment, oxygen, phosphate, ammonia, and methylation of mercury) and to fisheries. In addition, we have not addressed impacts to recreation.

The USFWS has prepared these comments under authority of Fish and Wildlife Coordination Act (16 U.S.C. §661 et seq.(FWCA)), Endangered Species Act of 1973, as amended (16 U.S.C. §§1531 to 1543 et seq. (ESA)), National Environmental Policy Act (42 U.S.C. §4321 et seq.), and the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §703 et seq. (MBTA).

General Comments

Our primarily concerns regard remaining uncertainty as to project impacts under Alternative 3, some aspects of the compensatory mitigation plan (CMP), and agency roles and oversight.

It is projected that the Chatfield Reservoir will fill to the 5,444-foot level in only 18 percent of years. This creates uncertainty with regard to impacts to existing vegetation just above and below 5,444 feet, as well as the potential for growth of weeds or more favorable vegetation that may establish during years when the reservoir is low. The Draft FR/EIS addresses a range of possible vegetation outcomes and suggests adaptive management to maintain resource values, but any vegetation patterns that develop could be temporary if storage patterns or water availability change. Future change in water users, potential storage under more senior water rights, new regional water projects, and potential impacts of climate change could influence future storage levels and fill frequency in the reservoir and alter currently projected impacts or initial results.

The Draft FR/EIS identifies potential downstream impacts to the aquatic environment in the South Platte River that may result from the preferred alternative. These impacts may stem from predicted alteration in the timing of flows, reduction in flows (particularly in the winter months), and an increased number of zero flow days. Reduced flows may in turn adversely impact water quality. The Draft FR/EIS describes conceptual mitigation approaches, mostly based on changing water retention times in Chatfield Reservoir and the timing of water releases downstream. While there is ample text describing potential actions to address these concerns, there appears no specific commitment to any such efforts. We believe that such commitments are needed and that details of how coordination efforts by water users would offset any downstream impacts must be established.

The Comprehensive Management Plan (CMP) includes methodology and techniques appropriate for quantifying project impacts to the federally listed Preble's meadow jumping mouse (*Zapus hudsonius preblei*) (Preble's), migratory birds, wetlands, mature cottonwood forest, and related resources. The CMP is based on an "ecological function unit" (EFU) concept that quantifies resources that would be lost and provides a basis for the full mitigation of these losses. The USFWS participated in the development of the EFU concept and is supportive of its use. However, while the basis of this methodology seems sound, the USFWS is concerned that certain aspects of its proposed implementation at mitigation sites inflate values assigned to compensatory mitigation, which could result in less than full replacement of resource values impacted.

Base mitigation values assigned for preservation and enhancement of resources on offsite mitigation properties (15 percent of site EFUs) appear appropriate, provided that long term assurances are in place to maintain values present. In the opinion of the USFWS, weighting factors employed to encourage selection of best mitigation properties (favoring those properties in proximity to Chatfield Reservoir, those that include upland buffers, and those that would increase connectivity of protected habitat) inappropriately inflate EFU mitigation credits. Sites that would be impacted at Chatfield Reservoir support these same characteristics: proximity – they are at the project site; buffers – they are generally surrounded by protected lands; and,

connectivity – they are part of more extensive riparian corridors extending upstream. Selected mitigation properties ideally would replicate these site characteristics and not be weighted to provide enhanced mitigation credit based on their presence. While weighting is justified in some cases, it would be more equitable if, under the CMP, both positive and negative weighting is employed to reflect whether or not mitigation sites include characteristics of impact sites where EFUs are lost. It appears that in the Model Review Report (Appendix I of Appendix K) reviewers were not provided details of weighting factors or their application to project mitigation. We suggest that this oversight be addressed.

As always, the USFWS is concerned that unavoidable impacts to fish and wildlife resources, including wetlands, will be fully mitigated. While we are supportive of the concepts underlying the CMP and have been committed to working jointly with other parties to ensure its successful development and appropriate implementation, changes needed in the CMP to fully mitigate for resource values lost could significantly drive up the overall cost of environmental mitigation under Alternative 3.

It has been our understanding that the Chatfield Water Providers (CWP) will be responsible for the successful implementation of the CMP, but that efforts will be led by the Colorado Department of Natural Resources (CDNR) with Corps oversight. However, the Draft FR/EIS reflects uncertainty regarding the roles of various agencies. For example, in the CMP (Appendix K) the role of the Corps and CDNR seems largely limited to review and comment on CMP implementation and changes to CMP strategies that the CWP may pursue through adaptive management. The CMP is complex and will require extensive oversight. The Corps must clearly maintain the authority to identify and pursue opportunities to minimize project impacts as opportunities may arise, to oversee mitigation and assure that monitoring commitments are met, and to approve any significant changes to CMP strategies.

Under ESA, a draft biological assessment was developed by the Corps and included as an appendix to the Draft FR/EIS. On August 20, 2012, the USFWS received a letter from the Corps requesting initiation of formal consultation under section 7 of the ESA regarding adverse impacts of the preferred alternative to listed species. The USFWS will review the biological assessment for sufficiency and, as appropriate, provide its biological opinion to the Corps in accordance with time frames established under the ESA. The Corps, in turn, is responsible for implementing terms and conditions prescribed by the USFWS in the biological opinion and, under some circumstances (including when the agency action is subsequently modified in a manner that causes an effect to listed species or critical habitat not considered in the biological opinion) may be required to reinitiate consultation.

A 2006 Planning Aid Letter on the Chatfield Reservoir Storage Reallocation, submitted to the Corps by the USFWS under the FWCA, is referenced in the Draft FR/EIS but is not included in Appendix X as cited. Appendix X does include a recent, brief update letter by USFWS, in which we state that the two letters together constitute our Draft FWCA report to the Corps. This omission is unfortunate in that reviewers were not able to see our previous comments and suggestions under the FWCA. A final FWCA report will be completed by the USFWS prior to project approval. The USFWS anticipates being involved throughout project and CMP implementation, and will participate in an appropriate advisory role to help assure compliance with the FWCA and success of the CMP.

Specific Comments

Draft FR/EIS

1.3.4.6, p. ES-12.

This section states that CDNR, "...through its agencies and nonfederal project partners will complete 100% of the integral work.." and that "...said work will involve every phase of design and construction..." For CDNR to maintain responsibility for project implementation (with Corps oversight) is consistent with our understanding of agency roles. Other sections of the Draft FR/EIS and especially Appendix K appear to contradict this by providing CWP broad authority to independently make decisions regarding project implementation.

2.1, p. 2-4

We agree with the statement in #4 that, "Strategically timed release of water from Chatfield Reservoir can potentially provide recreational and environmental benefits to the urban and downstream reaches of the South Platte River." But, on the same page, 2.2.1, Planning Objectives, include only "...fully mitigating unavoidable significant impacts..." The FWCA calls on Federal agencies to pursue measures to improve fish and wildlife values and adopt such measures, where appropriate, to obtain maximum project benefits. Throughout the document, timing releases of water to offset projects impacts downstream or enhance downstream resources are mentioned with no specific commitment as to whether or how these efforts would be pursued.

3.8.1., p. 3-48.

The USFWS 2002 list of Birds of Conservation Concern was updated in 2008. Species listed for USFWS Region 6 have changed. See: http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf for the current list.

Figures 3-15 and 3-16, pp. 3-79 and 3-81.

CPW mapping of Preble's occupied range depicts only areas where jumping mice have been captured (as of 2007) and nearby riparian habitats. It does not include stream segments where proximity to known Preble's occurrence and continuity of habitat suggest that occupancy is likely. This limits the utility of these figures, which may erroneously be interpreted to depict areas where the Preble's is absent. Substituting or overlaying Douglas County riparian habitat mapping produced in conjunction with the Douglas County Preble's Habitat Conservation Plan would better depict the likely occurrence of the Preble's. Designated critical habit for the Preble's might also be included in these figures.

4.1.1., p. 4-2

This section begins by describing a cycle of steps necessary to implement adaptive management: problem assessment, design, implementation, monitoring, evaluation, adjustment, and then recycling through earlier steps. Too often the Draft FR/EIS uses "adaptive management" as a general term to address response to uncertainty or unanticipated consequences of project implementation. In each case where adaptive management is proposed or mentioned (approximately 120 times in the Draft FR/DEIS not including appendices) it should be clear what the problem is, what the design to address it consist of, what monitoring will take place, and how results will be evaluated. Table 4-1, pp. 4-3 through 4-5, includes a column entitled "Required Adaptive Management." In most instances no monitoring is referenced, only uncertainties and possible measures that could be employed to address impacts. Despite the column title, descriptions are limited largely to 'adaptive management will be used' and a list of possible measures to address impacts.

4.5.3., p. 4-49

In the first paragraph, it should be pointed out that the anticipated "new reservoir effect" that could provide a positive benefit to food chain production is caused by the same decay of organic materials cited as a possible problem to maintaining water quality.

4.5.3., p. 4-49

In the second paragraph, aquatic community benefits from increased shallows may result from a proportional increase of shallow to deeper waters at Chatfield Reservoir. Cited acreage increase versus shoreline increase from 5,432 to 5,444 feet does not address the question. Calculating the ratio of shallow (<4 ft.) to deeper water over the entire reservoir at these two levels (before and after reallocation) would determine whether an increase in proportion of shallows would occur.

4.5.3., p. 4-52

The first paragraph presents an apparent contradiction. It states both that base flow in winter is a critical aquatic stressor in the South Platte River and that management of reservoir outflow to maintain 10 cfs could greatly improve habitat for fish, but also that a predicted decrease in winter flows downstream from Chatfield Reservoir under Alternative 3 would result in minimal or no impact to aquatic biota. See also 5.3.4, p. 5-12 that lists "Depletion of winter base flows below Chatfield Reservoir under Alternatives 3 and 4." under, "The major potential adverse impacts that have been identified..." Projected average monthly percent decrease in river flow under Alternative 3 is greatest during winter months (see Figure 4-12). Daily decreases in flow may be even more severe (see 5.5.1.6., p. 5-20) and zero flow days are predicted to rise. The conclusion that decreases in winter flows downstream of the reservoir would result in minimal or no impact seems unwarranted.

4.5.5, p. 4-56

Citation of the USFWS 2006 Planning Aid Letter as a source of a general comment regarding potential changes to future flow patterns in the South Platte River (that they will likely occur) appears misplaced.

Figure 4-10, p. 4-62

Most grassland at Chatfield Reservoir is dominated by introduced species and of relatively low resources value. The projected loss of 15.6 acres of native perennial grassland should be mitigated, and could be, through conversion a similar acreage of non-native grassland to native grassland.

Figure 4-18, p. 4-76

The figure depicts that over the previous 20 years in the period of record (1980-2000), under Alternative 3 the reservoir would have filled to 5,444 feet in almost every year. This contrasts with the statement (Table 2-9, p. 2-67) that under Alternative 3, the pool elevation of 5,444 feet is predicted to be met in only 18 percent of years or the statement (4.9.3, p. 4-93) that maximum pool elevation is expected to be attained "only once every 3-4 years." These discrepancies should be explained.

4.8.5, p. 4-86

This section starts by stating that, "Prior to implementation of an alternative, actions to reduce the level of impacts will be considered." The discussion immediately switches to examples of potential "adaptive management" measures. This exemplifies the Draft FR/EIS's lack of solid commitment to a variety of measures mentioned in the document that "could" or "would" reduce or offset impacts. Appendix CC, Items of Non-Federal Cooperation, suggests that some of these issues may be resolved independent of the Federal action. We believe that all measures to reduce and mitigate impacts should be part of the Federal action.

4.9.3., p. 4-93

This section refers to the "current understanding of how water providers would access and store water in Chatfield." There should be a mechanism for future re-evaluation of all project impacts should a significant change in access to and storage of water in Chatfield Reservoir occur, either by the existing water providers or, potentially, future new water providers.

4.9.3., p. 4-95

The fifth paragraph references only impact to Preble's critical habitat along the South Platte River, not along Plum Creek. Since much of the document may have been drafted prior to USFWS's 2010 revised designation of critical habitat that included Plum Creek, all references to critical habitat should be checked to include that update.

5.5.8.2., p. 5-30

The third paragraph cites the Biological Assessment's (Appendix V) conclusion that the proposed action is likely to adversely affect the Preble's and to "adversely modify" its designated critical habitat. Both here and in Appendix V the correct statement should read "...and "adversely affect" its designated critical habitat." Whether the proposed alternative is likely to destroy or adversely modify designated critical habitat will be determined by the USFWS in the biological opinion.

Appendix K

Executive Summary, p. 4.

There is an error at the top of the page. The project coordination team would include CDNR, but not the USFWS.

1.0., p. 7.

There is an error in the first full paragraph, which states, "EFUs were not used for off-site mitigation of impacts to designated Preble's critical habitat." They are being proposed for that use and this statement is contradicted later on the page.

3.1, p. 11.

Here and elsewhere the document states that USFWS policy requires that impacts to designated critical habitat must be mitigated within the same critical habitat unit. A citation (Service 2004) is to a draft memorandum on application of the "destruction or adverse modification" standard, and not a policy on mitigation. More accurately, in accordance with the memorandum, USFWS considers only mitigation actions within the same critical habitat unit when determining whether an action will result in destruction or adverse modification of critical habitat.

6.1.1, p. 23.

Based on information provided in an August 29, 2012, interagency meeting and site visit at Chatfield Reservoir, one of the three primary habitat conservation activities proposed for onsite mitigation in Appendix K, installation of sheet pile cutoff structures to raise the ground water table, is no longer planned. A second activity, creations of secondary channels, ditches, and backwaters to bring surface water to mitigation areas, has been modified to largely exploit water from lakes, and both water availability and soil permeability at potential mitigation sites is yet to be tested. These changes exemplify the preliminary nature of the CMP and the need for much more certainty regarding details prior to the Final FR/EIS.

6.1.1.2., p. 27 and 6.2.1.1., pp. 34-35.

Success criteria for mitigation sites should be refined. Specific criteria should be developed for accepting "volunteer" plants and "vegetative reproduction" instead of planted trees and shrubs. Criteria for allowable percentage of State A-list noxious weeds on mitigation sites should be zero

percent, as generally required by the Corps' Littleton Regulatory Office on wetland permits they issue.

6.1.3., p. 31

The second full paragraph refers to potential mitigation credit for weed control at Chatfield Reservoir. Weed control is part of the success criteria and no credit should be given for weed control on mitigation sites at Chatfield Reservoir.

6.2.2., pp. 36 -38.

This section addresses whether needed EFUs for mitigation of project impacts can be achieved within offsite target habitat. We have little basis to judge whether 15 percent of existing acreage and EFUs on target habitat would be available (based on the prospect of cooperative landowners). However, we have significant concerns over application of weighting in the ecological functions approach, as exemplified here and detailed in Appendix C of Appendix K. In the example provided on p. 38 there is no explanation as to why weighting factors would be multiplied together rather than added to base values individually. When the same weighting of connectivity and buffers are calculated separately and then added to base EFUs , 739 rather than 791 mitigation EFUs are generated, a reduction of approximately 7 percent in credited mitigation.

7.1.3., p. 57.

In the last paragraph, the Project Coordination Team would be given no opportunity to review and comment on CWP protection of properties or buffers within the target area. Given unforeseen complexities of protection efforts, this provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.

7.1.3., p. 58

Property management plans developed by CWP should be subject to Project Coordination Team approval, not just review and comment as stated in the second paragraph. This provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.

7.1.3., pp. 58-59.

Required components of mitigation plans, as listed, are acceptable. However, failure to protect existing EFUs through negligent management should result loss of EFU credits. It should also be clear that management plans will be required to address management in perpetuity.

7.3., p. 68.

The fourth bullet addresses impacts to the Preble's and its habitat. Our biological opinion would set terms and conditions that the Corps would implement through decision documents and

agreements. It is the Corps' responsibility to see that terms and conditions are implemented and to maintain authority over their implementation. The biological opinion would also address circumstances where formal consultation under section 7 of the ESA would be reinitiated.

7.3, p. 69.

The first bulleted statement provides the Chatfield Reservoir Mitigation Company "exclusive control over mitigation activities to satisfy the mitigation obligations described in the project decision document." This provision for the CWP to act without oversight appears unacceptable. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.

7.3, p. 70.

The first paragraph appears contradictory. It both describes the Project Coordination Team as a means for the Corps and DNR to oversee the project and provides the team only a role of providing comments and recommendations to the CWP "for their consideration." This provision implies that the CWP may ignore recommendations of the Project Coordination Team. Any provision that allows the CWP to act without oversight appears unacceptable. In the last paragraph, the ability of CWP to reject recommendations of technical committees may be appropriate, but the Corps, alone or through the Project Coordination Team must retain authority over project implementation.

7.5., p. 75

In the first full paragraph, details of how the CMP would address fire, flood, drought, or other natural or manmade events impacting the mitigation sites should be expanded and refined. While the CWP are not responsible for certain events impacting mitigation lands, the CMP should address remediation of sites following such events as an aspect of site management plans and address how EFUs lost or subsequently regained would be accounted for.

7.5.1., p.77.

The full impact of project implementation to existing vegetation from 5,439 to 5,444 feet and above may not become evident until a series of wet or dry years occurs. Until then, full impacts of the reallocation project and the extent of actions needed to fully mitigate impacts will not be known.

7.6. pp. 83-84. Agency oversight

The Corps and CDNR roles and authorities appear inappropriately limited to review and comment on annual reports produced by the CWP. In addition, the Corps has say over determining when the CMP success criteria have been met. The Corps, alone or through the Project Coordination Team, must retain authority over project implementation.

7.6., pp. 84-85.

The role of the USFWS regarding Preble's and any other listed species under ESA includes oversight of Corps adherence to terms and conditions of any biological opinion issued. The Corps in term must retain authority over project implementation. In this context, both the USFWS and Corps will have roles in overseeing mitigation plans regarding the Preble's and subsequent changes to plans.

Appendix C of Appendix K

4.2., p. C-16

In the first paragraph, the base EFU mitigation value assigned for preserving existing offsite mitigation lands (15 percent of EFUs present) is garnered from preservation in perpetuity, "... protecting habitat against somewhat speculative and future events..." How the aftermath of fire, flood, and other rare but foreseeable occurrences at mitigation sites would be addressed under the CMP must be determined.

4.2., p. C-17

In the first paragraph, future delisting of the Preble's does not mean its habitat would likely be increasingly lost. A recovery plan would likely link a mechanism for long-term protection of important habitat to any delisting action.

4.3.1., p. C-19.

Under the proposed weighting scheme, for bird habitat values mitigation sites in close proximity to Chatfield Reservoir, EFUs are weighted at 1.25. At sites further away they are weighted at 1.0. Mitigation near the site of impact is assumed more desirable, but traditionally gets full credit (1.0) while mitigation at sites further away usually get less (< 1.0). The proposed weighting inflates the value of both near and far offsite mitigation to birds.

4.3.2., pp. C-19-20

The USFWS agrees that buffers, as described, increase value of target mitigation habitat. However, assigning positive weighting values based on "average" buffer rather than "minimum" buffer width (see the last paragraph on C-19) ignores the likelihood that the closest human intrusion usually represents the greatest concern. USFWS recommends that minimum buffer width be used as the standard rather than average width. As for the actual weighting for presence of buffers, EFUs times 1.3, 1.5, or 1.6 depending on buffer width, we find the weighting scheme somewhat arbitrary. Habitat that would be lost at Chatfield Reservoir is largely buffered by preserved lands. To compensate for that loss, mitigation sites should be reasonably buffered from human impacts or perhaps receive reduced mitigation credit. In addition, credit for buffers on only one side of a targeted stream reach (while the other side of the stream remains vulnerable to infringing human impacts) doesn't represent proportional buffer value. We recommend that the weighting scheme for buffers receive expert review. It appears that the weighting approach

was not commented on by expert reviewers; they were only informed that weighting would be used in determining EFU "debits" and "credits."

4.3.3, pp. C-20-23

Proposed weighting of mitigation sites for contribution to habitat connectivity, of up to 3.0 times the EFU value present, would provide incentives to link protected lands. However, habitat that would be impacted at Chatfield is part of a currently protected riparian system, and offsite lands targeted should also contribute to protected riparian connectivity. We believe that the weighting scheme overvalues mitigation efforts and may result in less than full mitigation values lost. Weighting could be given to targeted habitat in stream reaches where habitat quality is poor, with no requirement that site plans include measures to enhancement habitat present. Targeted mitigation lands currently experience a range of protections (see 4.19.9 of the Draft FR/EIS which indicates impacts would be minimized or mitigated given the current regulatory framework.), so existing connectivity of corridors is likely to persist. Preble's has the capability to traverse stream reaches where habitat it less than optimal, as reflected in the designation of critical habitat where a stream reach represents only a travel corridor. Preble's populations are supported by both areas of high quality riparian habitat and lower quality travel corridors. Lack of barriers to movement is more critical than continuity of high quality habitat. The weighting scheme for connectivity could benefit from expert review. With a refined scheme in place, a technical committee may be needed to oversee complexities of site specific application.

4.3.3, p. C-22.

Here and elsewhere in the document, the Preble's Draft Recovery Plan (cited as Service 2003) is not an official, signed USFWS draft plan under the ESA. In the past the USFWS has referred to it as a Working Draft.

If you need further assistance regarding the issues addressed above, please contact Peter Plage [redacted].

U.S. Geological Survey Comments

Chapter 4

General: Increased water-level fluctuations may result in increased mercury concentrations in fish, and could result in mercury advisories. Mast and Krabbenhoft (2010), in a study of two similar front-range reservoirs, associated elevated fish-mercury concentrations with fluctuations in reservoir water levels. The water-level fluctuations resulted in geochemical changes that resulted in methylation and increased availability to fish. We suggest that the DEIS include a discussion of the possibility and consequences of elevated mercury concentration in fish, and the possible impacts for anglers. References include:

Mast, M.A., and Krabbenhoft, D.P., 2010, Comparison of mercury in water, bottom sediment, and zooplankton in two Front Range reservoirs in Colorado, 2008–09: U.S. Geological Survey Scientific Investigations Report 2010–5037, 20 p.

Sorensen, J.A., Kallemeyn, L.W., and Sydor, M., 2005, Relationship between mercury accumulation in young-of-the-year yellow perch and water-level fluctuations: Environmental Science and Technology, v. 39, p. 9237–9243

Selch, T.M., Hoagstrom, C.W., Weimer, E.J., Duehr, J.P., and Chipps, S.R., 2007, Influence of fluctuating water levels on mercury concentrations in adult walleye: Bulletin of Environmental Contamination and Toxicology, v. 79, no. 1, p. 36–40

If you have any questions concerning this comment, please contact Gary LeCain, USGS Coordinator for Environmental Document Reviews, [redacted]

Sincerely,

Robert F. Stewart
Regional Environmental Officer

HIGHLANDS RANCH
Metro District

62 West Plaza Drive
Highlands Ranch, Colorado 80129

303-791-0430 - Telephone
303-791-0437 - Management / Engineering - Fax
303-791-3290 - Financial / Customer Service - Fax
www.highlandsranch.org

June 27, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

Please find enclosed a resolution passed on June 26, 2012 by the Highlands Ranch Metropolitan District Board of Directors in support of the Chatfield Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment.

Sincerely,

Terry Nolan
General Manager

cc: John Hendrick

HIGHLANDS RANCH
Metro District

HIGHLANDS RANCH METROPOLITAN DISTRICT
RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS the Highlands Ranch Metropolitan District provides a wide range of community services to the 93,000 residents of Highlands Ranch, and

WHEREAS the Highlands Ranch Metropolitan District is served through an intergovernmental agreement with Centennial Water and Sanitation District which utilizes water through several water rights and infrastructure that diverts water through Chatfield Reservoir, and

WHEREAS the Highlands Ranch Metropolitan District has become aware of the availability of using existing storage space in Chatfield Reservoir for municipal, agricultural and environmental purposes while maintaining the flood control purposes of the reservoir, and

WHEREAS it is important to the local area to increase renewable water sources through environmentally-prudent and cost-effective means, and

WHEREAS, as discussed in the Colorado Water Conservation Board's State Water Supply Initiative study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 acre feet per year in the South Platte River Basin over the next 40 years, and

WHEREAS the reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water user groups and many other interested parties, and

WHEREAS the project has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS reallocation of space in Chatfield Reservoir will make better use of an existing facility and capture runoff which would otherwise be lost downstream, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Highlands Ranch Metropolitan District Board of Directors supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to be made part of the record of public comments on this Draft Integrated FR/EIS, and

BE IT FURTHER RESOLVED that the Highlands Ranch Metropolitan District urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Richard R Owens
Name of elected official

Board Chair
Title of elected official

HIGHLANDS RANCH METROPOLITAN DISTRICT NO. 5

SUPPORT FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS Highlands Ranch Metropolitan District No. 5 is very acutely aware of the availability of utilizing existing storage space in Chatfield Reservoir for municipal, agricultural and environmental purposes while maintaining the flood control purposes of the reservoir, and

WHEREAS it is critical to the local area to increase renewable water sources through environmentally prudent and cost-effective means, and

WHEREAS, as discussed in the Colorado Water Conservation Board's State Water Supply Initiative study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

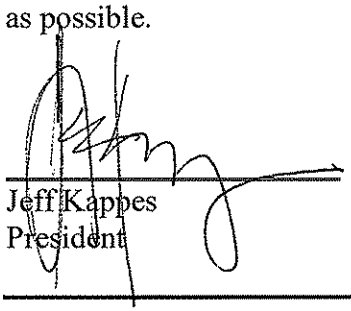
WHEREAS the project has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS reallocation of space in Chatfield Reservoir will make better use of an existing facility and capture runoff which would otherwise be lost downstream, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Highlands Ranch Metropolitan District No. 5 supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to be made a part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Highlands Ranch Metropolitan District No. 5 urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.



Jeff Kappes
President

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

July 25, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned, Lakehurst Water and Sanitation District are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Lakehurst Water and Sanitation District
Board of Directors

Mr. Dave Bane, President
Mr. William "Jake" Schild, Vice President
Mr. Steve Posavec, Secretary
Mr. Mitch Gerstenkorn, Treasurer

RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping, and

WHEREAS allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of state-flows, and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes, and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Lakehurst Water and Sanitation District supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Lakehurst Water and Sanitation District urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Respectfully Submitted,

Lakehurst Water and Sanitation District
Board of Directors

Mr. Dave Bane, President
Mr. William "Jake" Schild, Vice President
Mr. Steve Posavec, Secretary
Mr. Mitch Gerstenkorn, Treasurer

METRO WASTEWATER RECLAMATION DISTRICT

6450 York Street - Denver, Colorado 80229-7499
(303) 286-3000 Telefax (303) 286-3030
www.metrowastewater.com

June 19, 2012

Attention: Gwyn Jarrett
U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
1616 Capitol Avenue (CENWO-PM-AA)
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Re: Chatfield Reservoir Storage Reallocation Project in Colorado

Dear Ms. Jarrett:

The Metro Wastewater Reclamation District is pleased to submit these comments in support of the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers that will provide the added benefit of watershed restoration flows in the South Platte River downstream of the reservoir.

The U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the Reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife, and water supply and the allocation/reallocation of water storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 Resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating

that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water to out-of-state flows in wet years.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural, and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U.S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U.S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Barbara Biggs
Governmental Affairs Officer

BJB:JD\wlh
SPRS 01\Chatfield Reallocation Ltr of Support FR-EIS 6-19-12_bjb.docx

Metropolitan Denver Water Authority

7800 S. Elati St., Suite 112 ~ Littleton, CO 80120 ~ (303) 947-0017 - Fax (303) 347-0018 ~ email: pic609@aol.com

July 24, 2012

Ms. Gwyn Jarrett
U.S. Army Corp of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
1616 Capital Ave.
Omaha, NE 68102-4901

Re: Chatfield Reservoir Storage Reallocation Project

Dear Ms. Jarrett;

The Metropolitan Denver Water Authority is a political subdivision of the State of Colorado organized in the mid 1980s to effect the development of water resources, systems and facilities for the benefit of its members, their inhabitants and others. The Authority has several water utility members located in the Southern Metropolitan Area of Denver, some of which are participants in the Chatfield Reservoir Storage Reallocation Project. Other members who are not project participants fully realize the importance and benefit of developing and enhancing water resources for municipal, industrial and agricultural purposes on the Front Range. Upon due consideration of the extensive benefits provided by the proposed project, the members of the Authority unanimously approved the enclosed Resolution in support of the project.

The members of the Metropolitan Denver Water Authority hereby urge you to move forward in an expeditious manner with the issuance of a Record of Decision and all necessary federal permits for the Chatfield Reservoir Storage Reallocation Project.

Yours sincerely,

Pat Fitzgerald

Patrick Fitzgerald
President

PJF/blb

Enclosure

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METRO DENVER WATER AUTHORITY

SUPPORT FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS Metro Denver Water Authority is very acutely aware of the availability of utilizing existing storage space in Chatfield Reservoir for municipal, agricultural and environmental purposes while maintaining the flood control purposes of the reservoir, and

WHEREAS it is critical to the local area to increase renewable water sources through environmentally prudent and cost-effective means, and

WHEREAS, as discussed in the Colorado Water Conservation Board's State Water Supply Initiative study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the project has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS reallocation of space in Chatfield Reservoir will make better use of an existing facility and capture runoff which would otherwise be lost downstream, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Metro Denver Water Authority supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to be made a part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Metro Denver Water Authority urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Patrick Fitzgerald
President

MOUNT CARBON METROPOLITAN DISTRICT
8390 East Crescent Parkway, Suite 600
Greenwood Village, CO 80111

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Mount Carbon Metropolitan District (the "District') is a quasi-municipal corporation and political subdivision of the State of Colorado with the power to provide facilities, services and programs to supply water. On behalf of the District, I am writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers, including the District.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts. In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

MOUNT CARBON METROPOLITAN DISTRICT

Thomas M. Clark
President

G:\14715\200\LCorps of Eng - Chatfield Support.doc

Northern Water

Northern Colorado Water Conservancy District

220 Water Avenue Berthoud, Colorado 80513
Phone 1-800-369-7246 • www.northernwater.org

July 24, 2012

U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Northern Colorado Water Conservancy District (Northern Water) is writing in support of the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. This is a much needed water storage and water management project for the Front Range and northeastern Colorado.

The U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently allocated to active storage without jeopardizing the reservoir's flood control purposes. The reallocation of this additional 20,600 acre feet of storage is also compatible with the reservoir's authorized purposes that include flood control, recreation, fish and wildlife and water supply.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to assist in paying for needed mitigation of environmental impacts and to assist in paying for modification of affected recreation facilities.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (CWCB has served as the non-federal sponsor for the study and has allocated $13 million to assist with implementation of the project).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture and manage available runoff within the South Platte River, providing additional needed water supplies to the 15 water users. This additional water supply not only benefits the 15 prospective water users, but also provides a means to better manage available water supplies, which is a benefit to the citizens of Colorado. Allocating the 20,600 acre feet of additional storage space to

entities holding adjudicated water rights to that water will make available for beneficial use as much as 20,600 acre feet of South Platte River water in wet years that may otherwise flow out-of-state unused.

In a drought year like 2012, the added water storage space in Chatfield Reservoir, along with water conservation efforts, would make a real difference by providing additional water for municipal, industrial, agricultural, and environmental purposes.

Northern Water strongly supports the Tentatively Recommended Plan in the Draft Integrated Feasibiiity Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project. During its meeting on July 13, 2012, the Northern Water Board of Directors adopted a resolution in support of the Chatfield Reservoir Storage Reallocation Project, a copy of which is enclosed. Northern Water requests that this letter and the enclosed resolution be made part of the record of public comments on the draft FR/EIS.

In addition, we urge the U.S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner. Further, we urge the U.S. Army Corps of Engineers, following its issuance of a Record of Decision, to act in an expeditious manner to reallocate 20,600 acre feet of storage capacity in Chatfield Reservoir to active storage in order to allow additional water to be stored in and managed by Chatfield Reservoir to the benefit of those that have participated in the Chatfield Reservoir Storage Reallocation Project, and to the benefit of the citizens of Colorado.

As we are sure you are aware, there is a projected increase in the annual water supply demands for municipal and industrial use within the South Platte River Basin of approximately 90,000 to 360,000 acre feet by the year 2050. It is imperative that every opportunity to better manage and beneficially use available water supplies be pursued and implemented, including conservation and reuse, better utilization of existing infrastructure, additional storage, and additional water management projects. The Chatfield Reservoir Storage Reallocation Project is an outstanding example of a project that includes and facilitates all these prudent and necessary water management strategies.

Sincerely,

Eric W. Wilkinson
General Manager

rdm

Enclosure (1)

NORTHERN COLORADO WATER CONSERVANCY DISTRICT

RESOLUTION
D-1200-07-12

SUPPORT FOR CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS, the U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes; and

WHEREAS, the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986; and

WHEREAS, the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties; and

WHEREAS, the Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as the non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation); and

WHEREAS, storing more water in Chatfield Reservoir will make better use of an existing facility and will capture and manage additional runoff flowing down the South Platte River and Plum Creek; and

WHEREAS, allocating that added storage space to entities holding adjudicated water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows; and

WHEREAS, in a drought year like 2012, the added active water storage capacity in Chatfield Reservoir, along with appropriate water conservation efforts, would make additional water available for municipal, industrial, agricultural, and environmental purposes; and

WHEREAS, as discussed in the CWCB's SWSI studies, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 acre feet per year in the South Platte River Basin over the next 40 years; and

WHEREAS, the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for a portion of the needed mitigation of environmental impacts and to undertake and pay for a portion of the modifications to, and relocation of, recreation facilities as needed.

NOW, THEREFORE, BE IT RESOLVED that the Northern Colorado Water Conservancy District supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U.S. Army Corps of Engineers to be made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Northern Colorado Water Conservancy District urges the U.S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner; and

BE IT FURTHER RESOLVED that the Northern Colorado Water Conservancy District urges the U.S. Army Corps of Engineers, following its issuance of a Record of Decision, to act in an expeditious manner to reallocate 20,600 acre feet of storage capacity in Chatfield Reservoir to active storage in order to allow additional water to be stored in and managed by Chatfield Reservoir to the benefit of those who have participated in the Chatfield Reservoir Storage Reallocation Project and to the benefit of the citizens of Colorado.

CERTIFICATE

I, Eric W. Wilkinson, do hereby certify that the above is a true and correct copy of a Resolution unanimously adopted by the Board of Directors of Northern Colorado Water Conservancy District at a regular meeting of said Board held in Berthoud, Colorado, on July 13, 2012.

Eric W. Wilkinson
Secretary

ADAMS COUNTY
COLORADO

Commissioners' Office
4430 South Adams County Parkway
5th Floor, Suite C5000A
Brighton, CO 80601-8204
PHONE 720.523.6100
FAX 720.523.6045
www.adcogov.org

August 29, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

The Adams County Board of Commissioners supports the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for stakeholders serving Adams County residents as well as other Front Range and northeastern Colorado water providers.

In particular, we support those stakeholders, one being Central Colorado Water Conservancy seeking Chatfield storage space to mitigate water wells important to the agricultural community in Adams County. Many of these wells pump from the alluvium adjacent to the South Platte River. Generally these wells have junior water rights and when owners of senior water rights downstream place a call (or request water) during the irrigation season, the agricultural usage from these wells is curtailed or halted under Colorado water law unless so-called "augmentation water" is available for release to the river to cover the out-of-priority depletions from the well pumping. Well pumping curtailment negatively impacts the Adams County agricultural community by reducing irrigation water supplies available to various types of crops. Storing more water in Chatfield Reservoir will make better use of an existing facility, assisting stakeholders in providing well augmentation to our agricultural operators.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report & Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS. In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely,

W.R. "Skip" Fischer
Chairman

ACWWA

ACWWA FLOW
ASSURING YOUR FUTURE WATER

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

August 17, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

We the undersigned Arapahoe County Water and Wastewater Authority Board of Directors are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Gary Atkin
General Manager
On behalf of the Arapahoe County Water and Wastewater Authority Board of Directors

Arkansas Basin Roundtable
Pueblo CO

August 21, 2012

Department of the Army
Corps of Engineers, Omaha District
CENWO-PM-AA
1616 Capitol Ave.
Omaha, NE 68102-4901

Attn: ***Chatfield Reservoir Storage Reallocation FR/EIS***

Dear Sir or Madam:

Enclosed please find a Resolution passed unanimously by the Arkansas Basin Roundtable in support of the Chatfield Reservoir Storage Reallocation FR/EIS. Thank you for your consideration.

Sincerely,

Gary Barber
Chair

c: Executive Committee, Ark Roundtable
Todd Doherty, CWCB staff

ARKANSAS BASIN ROUNDTABLE RESOLUTION OF SUPPORT
FOR THE
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS the Arkansas Basin Roundtable is an integral component of the Interbasin Compact Committee formed under the Colorado Water for the 21st Century Act through House Bill 05-1177, and

WHEREAS the Arkansas Basin Roundtable recognizes that the Chatfield Reallocation Project is an Identified Project ("IPP") for increasing renewable water supplies for many water users along the Front Range, and

WHEREAS, as discussed in the CWCB's SWSI study as supported by the Arkansas Basin Roundtable, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the Arkansas Basin Roundtable recognizes that renewable water supplies for some South Platte water users are derived from the Arkansas River Basin, and therefore, any IPP which provides additional storage is aligned with the projects and methods the Arkansas Basin Roundtable has identified for meeting the Front Range water supply gap, and

WHEREAS the Arkansas Basin Roundtable includes region-wide representatives from municipal, agricultural, and environmental groups, all of which will benefit in some fashion from the project and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held while preserving the reservoir's flood control purposes, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts, to undertake and pay for modification of recreation facilities as needed, and to reimburse the Federal Government for $14 million towards the original construction of Chatfield Reservoir, and

NOW THEREFORE BE IT RESOLVED that the Arkansas Basin Roundtable supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Arkansas Basin Roundtable urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that water can be stored in Chatfield Reservoir and used beneficially as soon as possible.

Gary Barber
Chair, Arkansas Basin Roundtable

BMR Metropolitan District
c/o CliftonLarsenAllen
8390 East Crescent Parkway, Suite 600
Greenwood Village, Colorado 80111-2811
(303) 779-5710

August 10, 2012

Via U.S. Mail
and Email:
chatfieldstudy@usace.army.mil

U.S. Army Corps of Engineers
Edward Zorwinsky Federal Building
CENWO-PM-AA
Attn: Gwyn Garrett
1660 Capitol Avenue
Omaha, Nebraska 68102-4901

Re: Chatfield Reservoir Storage Reallocation Project

Dear Ms. Garrett:

The BMR Metropolitan District ("District"), acting by and through its Board of Directors ("Board"), is writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado, as described in the draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. The Board believes that this is a much needed water supply opportunity for the Front Range and Northeast Colorado providers.

The U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson Counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The reservoir's currently authorized purposes include flood control, recreation, fish and wildlife, water supply, and the reallocation of storage space.

A draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 perspective water user groups, and many other interested parties. The water providers who contract and pay for the use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts, and to undertake and pay for mitigation of recreation facilities, as needed.

The Chatfield Study has been supported by the Colorado Congressional Delegation (FY2007-FY2012 appropriation bills and numerous joint letters), Colorado General Assembly (SJR 07-019), and the Colorado Water Conservation Board (serving as non-Federal sponsor of the Study, January 2010 Resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water storage shortage of approximately 99,000 to 360,000 acre feet per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

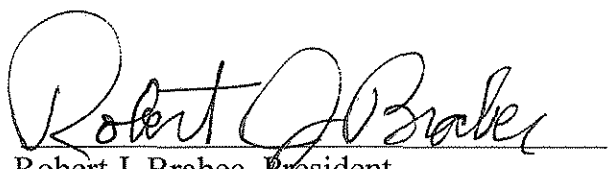
In a drought year, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the tentatively recommended plan in the draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project, and direct that this letter be delivered to the U.S. Army Corps of Engineers to be made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U.S. Army Corps of Engineers to complete its final review of the project and issue a record of decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely Yours,

BMR Metropolitan District

By: 
Robert J. Brabec, President

RESOLUTION NO. 2012-8-1

BMR METROPOLITAN DISTRICT

A RESOLUTION OF SUPPORT FOR CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS, the U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson Counties, can safely store an additional 20, 600 acre feet of water beyond that currently held without jeopardizing the Reservoir's flood control purposes; and

WHEREAS, the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986; and

WHEREAS, the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties; and

WHEREAS, the Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation); and

WHEREAS, storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping; and

WHEREAS, allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows; and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes; and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years; and

WHEREAS, the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE BMR METROPOLITAN DISTRICT OF THE COUNTY OF DOUGLAS, COLORADO that it supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U.S. Army Corps of Engineers to be made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the **BOARD OF DIRECTORS OF THE BMR METROPOLITAN DISTRICT** urges the U.S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

APPROVED AND ADOPTED this 7 **day of** Aug **2012.**

BMR METROPOLITAN DISTRICT

By: Robert J. Brabec
Robert J. Brabec, President

Attest:

Russell J. Grant
Russell Grant, Secretary/Treasurer

CASTLE PINES

METROPOLITAN DISTRICT

July 19, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned Board of Directors are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir intend to pay their agreed upon share of the necessary mitigation costs of environmental impacts and for modification of recreation facilities.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-

federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

We have been advised that there is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference between having enough, or not having enough, water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

CASTLE PINES METROPOLITAN DISTRICT
BOARD OF DIRECTORS

Jacquelyn Sundquist Jerry Spradling Karl Krueger

Robert Tomz Ralph Yarusso

received
12/9/12

RESOLUTION NO. 12-44

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO SUPPORTING THE CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS, the U.S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional twenty thousand six hundred acre feet (20,600 a.f.) of water beyond that currently held without jeopardizing the reservoir's flood control purposes; and

WHEREAS, the reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986; and

WHEREAS, the Draft Integrated Feasibility Report / Environmental Impact Statement (FR/EIS) for the Chatfield Reservoir Storage Reallocation Study (the "Reallocation Study") has been prepared by the U.S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, including the Castle Pines North Metropolitan District (CPNMD); and

WHEREAS, CPNMD provides water service within the boundaries of the City of Castle Pines; and

WHEREAS, the Reallocation Study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the Reallocation Study) through formal adoption of its January 2010 resolution, and allocation of $13 million to assist with implementation); and

WHEREAS, storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping; and

WHEREAS, allocating the additional storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 a.f. of South Platte River water in wet years to out-of state-flows; and

WHEREAS, in a drought year like 2012, the additional water storage space in Chatfield Reservoir (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes; and

WHEREAS, as discussed in the Colorado Water Conservation Board's Statewide Water Supply Initiative (SWSI), there is an anticipated water supply shortage, or gap, of approximately 262,700 to 435,000 acre feet per year in the Denver metropolitan area over the next 40 years, and

WHEREAS, the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO THAT:

Section 1. The City of Castle Pines supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project; specifically, the City of Castle Pines supports the reallocation of 20,600 a.f. of Chatfield Reservoir's flood control storage to water supply storage.

Section 2. The City of Castle Pines urges the U.S. Army Corps of Engineers to complete its final review of the Chatfield Reservoir Storage Reallocation Project and timely proceed to issue a Record of Decision in order to ensure that additional water may be stored in Chatfield Reservoir as soon as possible.

Section 3. The City Council directs the Deputy City Clerk to submit a copy of this Resolution (Resolution No. 12-44) to the U.S. Army Corps of Engineers, in order that this Resolution may be made a part of the record of public comments on the Draft Integrated FR/EIS.

Section 4. **Effective Date**. This Resolution shall take effect upon its approval by the City Council.

INTRODUCED, READ AND ADOPTED AT A REGULAR MEETING OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES by a vote of 6 in favor, 0 against and 1 absent this 26th day of June, 2012.

Jeffrey T. Huff, Mayor

ATTEST:

Dan Schatz, City Clerk

APPROVED AS TO FORM:

Linda C. Michow, City Attorney

Castle Rock
CHAMBER OF COMMERCE
and visitors center
"Serving Douglas County"

June 29, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

The Board of Directors of the Castle Rock Chamber of Commerce are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

TELEPHONE 303-688-4597 FACSIMILE 303-688-2688
420 JERRY STREET PO BOX 282 CASTLE ROCK, CO 80104
CastleRock.org * VisitCastleRock.org * info@castlerock.org

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Pamela Ridler, CCE
President/CEO

RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping, and

WHEREAS allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of state-flows, and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes, and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Castle Rock Chamber of Commerce supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Castle Rock Chamber of Commerce urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Aaron Barrick, Chairman of the Board
Castle Rock Chamber of Commerce

CENTENNIAL
WATER AND SANITATION DISTRICT

September 6, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Re: Chatfield Water Providers' comments on Draft Integrated Feasibility Report/Environmental Impact Statement (Draft FR/EIS) for the Chatfield Reservoir Storage Reallocation Study

Dear Ms. Jarrett:

The Chatfield Water Providers are a consortium of water providers (Water Providers)[1] from Park County, to the Denver metropolitan area, to Weld County in northeast Colorado on whose behalf the Colorado Department of Natural Resources (CDNR) has requested the U.S. Army Corps of Engineers (Corps) reallocate space within Chatfield Reservoir for water supply purposes. The Providers have immediate and future water supply needs that extend beyond current supplies due to population growth, depletion of nonrenewable groundwater sources, and the agricultural providers' needs for augmentation water for their alluvial wells. We appreciate the Corps' work in preparing the Draft FR/EIS to facilitate its decision making on the reallocation request, and support the Chatfield reallocation alternative with 20,600 acre-feet of reallocated storage (Alternative 3) as the best way to meet a portion of the Water Providers' demands. Following are our comments on the Draft FR/EIS.

1. Tentatively Recommended Plan

The Draft FR/EIS selects Alternative 3 as the tentatively Recommended Plan, based on an evaluation of the proposed alternatives pursuant to applicable Corps planning criteria. (Draft FR/EIS Section 1.3.3.6 and 1.3.4, pages ES-10 to ES-13; Section 5.4, pages 5-14 to 5-17; Section 5.5.4, page 5-22; Section 7, pages 7-1 to 7-2). We support the Corps' conclusion in the Draft FR/EIS that Alternative 3 is the best alternative for addressing the vastly growing demand for water supply in Park County, the Denver metropolitan area, and in northeast Colorado (Draft FR/EIS Section 7, page 7-1) and are supportive of selection of this Alternative as the final Recommended Plan in the Final FR/EIS.

[1] These comments are submitted on behalf of the collective Water Providers with the exception of the Colorado Water Conservation Board, which has commented separately.

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2. Participant Storage Allocations

The Draft FR/EIS identifies the Water Providers who are requesting storage space in Chatfield Reservoir (Table 1-1, page 1-10), while recognizing that the allocation agreements include a mechanism to transfer allocation ownership. As described in the Draft FR/EIS, certain Water Providers have in the past chosen not to pursue their allocated amounts and their allocation has been assumed by other entities. (Draft FR/EIS Section 1.5, pages 1-10 to 1-11). It is foreseeable that other Providers may choose to reassign their allocations in the future. The Final FR/EIS should recognize that participants have flexibility to readjust their specific storage allocations in Chatfield pursuant to the mechanism in the agreements, provided such reassignment of interests does not result in significantly different impacts from those evaluated in the EIS.

3. Contractual Relationships between the Corps, State, and Water Providers

The CDNR and the Water Providers anticipate that the reallocated storage space in Chatfield Reservoir and the right to use of that reallocated space will be established through the Project Partnership Agreement (PPA) to be entered into between the Corps and the CDNR and through simultaneous assignments from the CDNR to the Water Providers of all but a few of the rights and obligations of the CDNR under the PPA. The PPA has not been finalized as of this date; however, the PPA will contain certain terms and conditions that are standard in all Corps projects and will require performance of all of the obligations of the Record of Decision necessary for implementation of the Project.

As proposed, through the assignment of the PPA, the Water Providers will assume all of the CDNR's rights, obligations and liabilities associated with the reallocated storage space and will be obligated to perform all of the required mitigation, and pay the Project Costs and the future OMRR&R. As part of the assignment, it is proposed that with the exception of the liabilities and obligations unrelated to the reallocated storage space, the CDNR will be relieved of all liabilities and obligations under the PPA because those liabilities and obligations will be assumed by the Water Providers. There are several reasons for the proposed simultaneous assignments to the Water Providers of the CDNR's rights and obligations under the PPA (except for those unrelated to the reallocated storage space), as described below.

First, the Water Providers, as primarily government entities, are required to retain control over the spending of their taxpayer funds, and they cannot delegate that spending authority to the State or the Corps. The required local control will come in two forms: ownership of the rights and obligations to store water in the reallocated storage space through the assignment of the PPA to the Water Providers by the CDNR (and the corresponding assumption of the liabilities associated with the storage space), and control via an entity to be created by the Water Providers over the funding, implementation and completion of the mitigation required by the anticipated Record of Decision.

Second, the Colorado Taxpayer Bill of Rights (TABOR) prohibits all government entities in the State who receive tax funding (including the CDNR and the Water Providers) from incurring unfunded liabilities. The Project Costs, not including future OMRR&R, will be approximately $130 million. In order to comply with TABOR, if the CDNR were to remain liable for all of the obligations and liabilities imposed upon CDNR by the PPA, CDNR would need to make an appropriation of the full amount of the Project Costs at the time of signing of the PPA. Since the Water Providers are the users of the reallocated space (and not the CDNR) and the Water Providers will be providing the funding for Project Costs, the CDNR can sign the PPA and comply with TABOR without making an appropriation of the full Project Costs, if the rights and obligations of the PPA related to the reallocated storage space are assigned to the Water Providers simultaneously with the signing of the PPA and the CDNR is released from those obligations by the Corps as part of that assignment.

In order to insure that the Water Providers can and will complete the required mitigation and pay the full Project Costs, each of the Water Providers intends to fully fund its prorata share of the Project Costs at the time of execution of the assignments of the PPA to the Water Providers, through the establishment of escrow accounts that will be drawn on as the Project moves forward. The funding of the Project Costs by the Water Providers provides assurance to the Corps and CDNR that all of the project components will be completed.

We request that the language in the EIS be revised to include the above description of the proposed contractual relationships between the entities or, if the specifics have yet to be agreed upon, to recognize that flexibility exists in how these contractual relationships will ultimately be structured. (See Draft FR/EIS, pages ES-13; 5-33 to 5-35; 5-46 to 5-47; 7-2; Compensatory Mitigation Plan, pages 54-55; 67-69; Figure 24).

4. Cost of Alternatives

Table ES-1 (Draft FR/EIS, page ES-8) shows an infrastructure cost of $10 million for Alternative 3. This is attributable to a pump and pipeline system estimated to cost $10 million that Roxborough Water and Sanitation District proposed at one time as its means to get water out of Chatfield Reservoir. The $112 million infrastructure cost for Alternative 4 also includes these proposed facilities. Roxborough subsequently withdrew those proposed facilities from consideration because it devised other water delivery arrangements. This change was communicated to the Corps (figures were revised), but this cost estimate was apparently inadvertently overlooked. The $10 million estimate is inaccurate and should be removed from both Alternatives 3 and 4. Thus, the information in Table ES-1 should be revised as follows:

A. There are *no* infrastructure costs for Alternative 3. This also would lower the overall cost of Alternative 3 to $174.4 million.
B. The infrastructure costs for Alternative 4 should be reduced from $112 million to $102 million. This would lower the overall cost of Alternative 4 to $193.4 million.

5. Plum Creek Riparian Area

Plum Creek and its associated wetland and riparian resources have undergone substantial changes over the past few years and these changes continue to occur. We request that the Final FR/EIS describe these changes to provide a more accurate description of the current resources along Plum Creek. Language similar to the following could be added to Section 3.6.1.3 where riparian resources are discussed.

> *Plum Creek and its associated wetland and riparian communities within Chatfield State Park are dynamic. Substantial accumulation of sediment in the upper reaches of Plum Creek has created channel changes and multiple channels, while reaches of Plum Creek closer to the reservoir have severely down cut (Corps 2011, Figure 4-30). These changes in channel morphology have in turn affected wetland areas and riparian resources along Plum Creek. Areas of accumulated sediment have raised the channel bottom, buried existing riparian areas and wetlands in sediment, and shifted the channel away from existing wetland and riparian resources. Channel down cutting has substantially lowered the alluvial water table leaving wetlands and riparian vegetation without a supportive hydrology. There are many areas of dead trees and desiccated wetlands which border the down cut reaches. These changes to Plum Creek and its wetland and riparian resources within the park are likely to continue to occur as major flow events allow the down cutting to extend further up the channel.*
>
> U.S. Army Corps of Engineers, Tri-Lakes Sedimentation Studies Area-Capacity Report; M.R.B. Sediment Memo 23a (Revised July 2011).

6. Reservoir Fluctuations

For Alternatives 3 and 4, the Draft FR/EIS conservatively focuses on the worst case scenario of potentially losing all of the existing vegetation and wildlife habitat below the new reservoir high water elevation. Readers of only the Executive Summary (ES) may come away with the impression that the worst case scenario is the only scenario. Chapter 4 of the Draft FR/EIS does a good job of describing both the maximum impact scenario *and* the likely scenario. We request that wording similar to the following be added to Section 1.3.3.2 on page 8 of the ES to more completely summarize the range of potential effects to vegetation and wildlife habitat associated with reservoir fluctuations for the many readers who will read only the ES of the Final FR/EIS.

> *Although a worst-case scenario approach was taken to ensure adequate mitigation would be planned and implemented, it is unlikely that all vegetation and wildlife habitat will be lost below the new reservoir high water line with reallocation (i.e., 5,444 feet msl for Alternative 3). Chapter 4 describes the more likely scenario. For example, for Alternative 3 the lower limit of persistent vegetation is estimated to be 5,438 feet msl with losses of upland vegetation and gains of wetland and riparian vegetation between 5,438 feet msl and 5,444 feet msl. The Tree Management Plan calls for retaining trees above 5,439 feet msl and using a monitoring and an adaptive management approach to subsequently*

remove trees between 5,439 feet msl and 5,444 feet msl on an as-needed basis to eliminate potential risks to visitors and dam safety.

7. Reservoir Operations Plan

Reviewers of the Draft FR/EIS may confuse the Draft Water Control Plan with the Operations Plan. The Water Providers will clarify this in the revised Compensatory Mitigation Plan (CMP). In addition, we request that a change be made to the last sentence in Section 4.3.5 (Draft FR/EIS, page 4-37) so as to read:

The Chatfield Water Providers will pursue development of an operations plan to minimize impacts as discussed in Section 7.5.2 of the CMP (Appendix K).

This language change will maintain consistency with the provisions of the CMP which require development of an operations plan by the Water Providers for minimizing impacts. (See CMP, Section 7.5.2, pages 76-83; Draft FR/EIS, pages 4-161 and 4-162).

8. Environmental Consequences

A. Aquatics

The Environmental Consequences section of the Draft FR/EIS concludes that the South Platte River below Chatfield Reservoir would have only minimal impacts under Alternative 3. (Draft FR/EIS, pages 4-51 to 4-52). The document contains additional statements that managing the timing, duration, and amount of flow from Chatfield could be an important tool in enhancing aquatic biota in the South Platte River. (Draft FR/EIS, pages 4-51 to 4-52; 4-55). We request that the EIS qualify those statements by including language that: *"The focus of any such flow management would be to improve habitat conditions above those that currently exist, by way of enhancement to the resource rather than required mitigation of adverse effects attributable to reallocation."*

B. Wildlife

- Appendix F – Appendix F lists species of mammals, birds, reptiles, and amphibians known to occur in the Project Area. As noted in footnote (c), species characterized in Colorado State Parks (1998) as "Infrequently Seen" are not included in the table. We suggest that the Appendix F table include species even if they occur infrequently at Chatfield State Park. The Corps should consider combining the Colorado State Park's 1998 list with data that has been provided by J. Kellner. (Kellner 2006). We also note that the northern leopard frog is discussed in the Draft FR/EIS as a Species of Concern (Draft FR/EIS, pages 2-72; 4-99; 4-103; 4-157; 5-12), but needs to be added to the Appendix F table at page F-7.

Kellner, J. and Spencer, A., Checklist of the Birds of Chatfield State Park (2006).

- Whooping Crane – The Draft FR/EIS and appendices contain inconsistent statements regarding the Whooping Crane. The documents state that this species has the potential to be affected by the proposed alternatives due to depletive effects in downstream reaches in other states (Draft FR/EIS, page 4-88), but recognize that this species has not been seen in Colorado since 2002 and has never been reported in the Chatfield Reservoir study area. (Draft FR/EIS Appendix V, Draft Biological Assessment, page 26). The Draft FR/EIS elsewhere states, however, that the whooping crane has the potential to occur in the Chatfield Reservoir study area. (Draft FR/EIS, page 4-97). The latter statement should be corrected. Please remove "whooping crane" from the last sentence in the first paragraph under *Central Platte River Species, Nebraska* on page 4-97 of the Draft FR/EIS.

- Wildlife Habitat – In the Draft FR/EIS, long-term successional increases in riparian and wetland communities are not used to temper the estimates of wildlife habitat losses (DEIS, pages 4-81; 4-92; Tables 4-9 and 4-10, pages 4-61 to 4-62; Tables 4-13 and 4-14, page 4-79). While we understand the benefit of disclosing a maximum impact scenario, it should be recognized that this approach is doubly conservative, insofar as the estimated changes in acreages assume both that all habitat will be lost below 5,444 feet msl and that no successional gains will be realized in wetland and riparian habitat types. We suggest the following be added to Section 4.8.3 Alternative 3 – 20,000 Acre-Foot Reallocation, at the end of the fifth paragraph on page 4-81 of the Draft FR/EIS to make this clear:

  The estimated losses of vegetation and wildlife habitat associated with inundation are doubly conservative because the estimated changes in acreages assume both that all wildlife habitat will be lost below 5,444 feet msl and that no successional gains will be realized in wetland and riparian habitat types. This conservative approach was taken to ensure adequate mitigation would be planned and implemented.

9. Climate Change

We suggest inclusion of language summarizing recent climate change studies. We have added relevant citations for those studies to our Comment 13, Additional References. We suggest the following be added to the discussion on climate change in Section 4.19 (Draft FR/EIS, page 4-142):

A large volume of scientific research and studies agree that global temperatures are increasing and that precipitation trends will change in the future. The warming trend is expected to accelerate in coming decades. In the western United States, longer periods of drought are expected and there is a call to re-evaluate

current infrastructure and standard infrastructure planning and design practices to consider conditions outside of the historical hydrology.

Climate change information specific to Colorado indicates that snowpack melting and spring runoff will occur earlier in the year, temperatures will increase by approximately 4 degrees Fahrenheit by 2050, with summers warming more than winters. There is not agreement on the potential changes to precipitation in Colorado, though modeling of the Colorado River Basin indicates overall lower runoff on the West Slope (Water Research Foundation, 2012).

It is recognized that the hydrologic modeling predictions in the EIS based on the historic period of record may be affected as a result of climate change. Impact and mitigation monitoring and specified adaptive management measures will help adjust mitigation measures as may be warranted due to these uncertainties.

10. Mitigation

The Compensatory Mitigation Plan (CMP) reflects a substantial work effort and, in concert with the Draft FR/EIS, provides sufficient detail to enable reviewers to understand the mitigation which is proposed and provide comments on the proposed mitigation. It also provides a process and schedule for moving toward increased specificity for environmental mitigation. Mitigation plans have been refined since preparation of the CMP and will continue to be refined as the EIS process proceeds and as mitigation proceeds from planning to implementation. ERO Resources (ERO), Muller Engineering (Muller), Ark Environmental (Ark), the Water Providers, and others have undertaken the following mitigation plan developments and refinements subsequent to the draft CMP, which should be noted in the Final FR/EIS:

A. ERO oversaw the installation of 80 groundwater monitoring wells in potential onsite mitigation areas.

B. ERO has been gathering information on the elevations of groundwater in the wells since May 2011. The data loggers record water in the wells every three hours.

C. Muller coordinated obtaining topographic survey information for the potential mitigation areas.

D. Muller oversaw soil sampling in the potential mitigation areas and evaluated the soils for permeability and other characteristics.

E. Using the groundwater monitoring data, topographic survey, and soil test results, Muller evaluated potential sources of supportive hydrology in potential mitigation areas.

F. Muller and ERO have refined the locations and limits of potential mitigation areas (several areas were eliminated from consideration due to lack of suitable hydrology).

G. Muller has developed preliminary grading plans for the remaining potential mitigation areas.

H. Muller is currently working with Colorado Parks and Wildlife to develop an access agreement to perform pump tests on several ponds along Plum Creek and the South Platte River to evaluate their suitability as sources of surface water for mitigation areas.

I. ERO has delineated wetlands in potential mitigation areas along Plum Creek and will do the same along the South Platte River. The delineations will be used to further refine mitigation area grading plans.

J. Ark, Muller, ERO, and the Water Providers have been evaluating what types of vegetation communities may persist below 5,444 feet msl under various hydrologic scenarios to better understand potential impacts versus the currently assumed worst case of no vegetation below 5,444 feet msl.

K. ERO is currently working on the habitat field evaluation to finalize the ecological functions model to refine the number of existing EFUs and EFU impacts based on existing site conditions.

11. Continued Reliance on Non-Tributary Groundwater (NTGW)

We have several comments regarding statements and assumptions in the Draft FR/EIS related to the sustainability of NTGW and the consequences of continued reliance on that non-renewable resource.

A. First, the description of Groundwater Hydrologic Conditions should recognize that the recoverable volumes referenced in Section 3.3.3 are regional estimates for the entire Denver Basin area and are not representative of what may be available from the aquifers on a localized basis. (Draft FR/EIS, page 3-11).

B. Second, we question the validity of the assumption that NTGW will be available for all Water Providers throughout the 50-year planning period considered in the economic analysis. (Draft FR/DEIS, page 2-24). It will likely not be physically possible for upstream providers near the edge of the aquifer to use NTGW through the full period of analysis, and the Draft FR/EIS should not assume that their water needs will be satisfied with NTGW. (Draft FR/EIS, pages 2-61; 5-18).

C. Third, we believe Chapter 4's discussion of Socioeconomic Impacts (Draft FR/EIS, pages 4-120 to 4-121; 4-159 to 4-160) affords a superficial treatment of the socioeconomic impacts attendant to continued reliance on NTGW resources. The

Hydrology Section identifies many of the concerns related to the eventual loss of groundwater as an economically viable resource (Draft FR/EIS, pages 4-31 to 4-35). We request that those considerations be identified as part of the indirect socioeconomic consequences under Alternative 2.

D. Fourth, there is no factual support for the assumption that Alternative 2 is technically and economically reasonable for consideration in supporting the purpose and need of increasing availability of water sustainable over the period of analysis (Draft FR/EIS, page 2-30 (initial screening criteria)). The assumption that Alternative 2 is "effective" in alleviating the identified problems and meeting the planning objectives under the P&G criteria (Draft FR/EIS, pages 5-15 to 5-16) also is contrary to known facts. One of the three identified problems is "[r]eliance of some municipal water providers on non-renewable Denver Basin groundwater," in recognition that the use of Denver Basin groundwater for municipal water supplies "has been determined to be an unacceptable long-term supply due to a path of severely increasing costs and the problems of currently reduced water availability and reliability that will continue to worsen in the future." (Draft FR/EIS, page ES-4). One of the planning objectives is to "[b]ecome less reliant on non-renewable groundwater by utilizing renewable water supplies, thus extending the availability and life of these critical aquifers for use by future generations." (Draft FR/EIS, page ES-5). Continued use of NTGW under Alternative 2 is simply not responsive to the above-described problem or planning objective.

For the above reasons, we believe that Alternative 2 is portrayed in an overly optimistic manner in the Draft FR/EIS. That being said, we note that Alternative 2 ultimately does not fare well in the evaluation of alternatives with respect to its overall contributions to the planning objectives; response to planning constraints; consistency with the P&G criteria; or consistency with the Corps' Environmental Operating Principles. We concur in that assessment.

12. Relationship between the WISE Project and the Chatfield Reallocation Project

Questions have been raised concerning the relationship between the Water Infrastructure and Supply Efficiency (WISE) Partnership and the Chatfield Reallocation, and whether both projects are needed by the participants common to both projects. We offer the following information concerning the relationship between these projects.

A. Both the Chatfield Reallocation and WISE projects are needed by the Participants that are common to both projects, and neither project can be substituted for the other or used to reduce the yield or need for the other project.

The Chatfield Reallocation Project and WISE Project have the following common participants:

Castle Pines North Metropolitan District
Centennial Water and Sanitation District
Town of Castle Rock

Pinery Water and Wastewater District
Cottonwood Water and Sanitation District
Stonegate Village Metropolitan District

These towns and districts have a projected future water supply demand of about 64,000 AF per annum by 2050 and currently have about 41,000 AF per annum of supply. However, about 22,723 AF of existing supplies are comprised of non-renewable NTGW that will decline over time. Even with the Chatfield Reallocation, the participants that are common to both projects will need another 23,000 AF to 45,700 AF per annum of supply by 2050 (depending to what degree they can continue to rely on non-renewable NTGW). WISE would supply 100,000 AF of water each 10 years to *all* of the WISE participants. While the annual delivery over the 10-year period averages 10,000 AF, in some years deliveries could be zero, and yields could average less than 10,000 AF per year over anything less than a 10-year period. The Chatfield Reallocation Project has an estimated average annual yield of 8,500 AF for *all* of the reallocation project participants. Thus, both the Chatfield Reallocation and WISE projects are needed by the participants that are common to these projects. Neither project can be substituted for the other or used to reduce the yield or need for the other, as additional supply beyond the Chatfield Reallocation and WISE projects is needed.

B. There is also no operational link between the WISE Project and the Chatfield Reallocation Project. The two proposed projects have independent utility. The Chatfield Reallocation participants would store water in the reallocated space at Chatfield Reservoir under water rights associated with their South Platte River and Plum Creek (upstream of the Denver metropolitan area) water portfolios. The WISE participants would store reusable supplies provided by Denver Water and Aurora Water in Parker Water and Sanitation District's Reuter-Hess Reservoir. The source of the Denver Water and Aurora Water WISE deliveries would include reusable return flows discharged from wastewater treatment facilities downstream of the Denver metropolitan area and temporary blend water from existing supplies redirected from temporary supply contracts to WISE from a connection at Denver International Airport (DIA). There are no existing or planned new facilities for diversion of reused WISE water into Chatfield Reservoir. Due to the value of the reusable water, WISE participants would be motivated to recapture "once used" WISE water as close to their service areas as they can, although it is possible that a small amount of the once used WISE water could be recaptured for subsequent use in the Chatfield reallocated storage space from water flowing down Plum Creek or water exchanged up the South Platte River by WISE Participants.

13. Additional References

We request that the following be added to the list of sources considered by the Corps:

A. Water Research Foundation, Joint Front Range Climate Change Vulnerability Study. Produced in collaboration with Denver Water, Colorado Springs Utilities, Boulder Department of Public Works, City of Aurora Utilities, Fort Collins Utilities, and the Northern Colorado Water Conservancy District (2012). http://cwcb.state.co.us/environment/climate-change/Pages/JointFrontRangeClimateChangeVulnerabilityStudy.aspx

B. Brekke, L.D., Addressing Climate Change in Long-Term Resources Planning and Management User Needs for Improving Tools and Information. U.S. Army Corps of Engineers and Bureau of Reclamation. Technical Report CWTS 10-02 (2011).

C. U.S. Army Corps of Engineers, Tri-Lakes Sedimentation Studies Area-Capacity Report; M.R.B. Sediment Memo 23a (Revised July 2011).

D. Western Resource Advocates, et al., Filling the Gap (2011).

We appreciate the substantial work that has gone into preparation of this Draft FR/EIS. Thank you for consideration of these comments.

Sincerely,

Submitted on behalf of the Chatfield Water Providers

Rick McLoud

for John Hendrick
General Manager
Centennial Water and Sanitation District

CENTENNIAL WATER AND SANITATION DISTRICT

RESOLUTION NO. 12-124

SUPPORT FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS Centennial Water and Sanitation District provides water and wastewater services to the community of Highlands Ranch through an intergovernmental agreement with the Highlands Ranch Metropolitan District, and

WHEREAS Centennial Water and Sanitation District is very acutely aware of the availability of utilizing existing storage space in Chatfield Reservoir for municipal, agricultural and environmental purposes while maintaining the flood control purposes of the reservoir, and

WHEREAS Centennial Water and Sanitation District is a major participant in the Reallocation Project, and will increase its supply of renewable surface water significantly from it, and

WHEREAS it is critical to the local area to increase renewable water sources through environmentally prudent and cost-effective means, and

WHEREAS, as discussed in the Colorado Water Conservation Board's State Water Supply Initiative study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the project has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS reallocation of space in Chatfield Reservoir will make better use of an existing facility and capture runoff which would otherwise be lost downstream, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Centennial Water and Sanitation District supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to be made a part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Centennial Water and Sanitation District urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Terri Kershisnik
President

Adopted this 25th day of June, 2012

Ayes 4 Nays 0 Abstained 0 Absent 1

Certified by _____, Secretary

RESOLUTION NO. 12-124
SUPPORT FOR CHATFIELD RESERVOIR
STORAGE REALLOCATION PROJECT

Chatfield Watershed Authority

August 10, 2012

Department of Army
Corps of Engineers, Omaha District
CENWO-PM-AA
ATTN: Chatfield Reservoir Storage Reallocation FR/EIS
1616 Capitol Avenue
Omaha, NE 68102-4901
Chatfieldstudy@usace.army.mil

Re: Draft Environmental Impact Statement
Chatfield Reallocation Proposal

Dear Army Corps of Engineers:

The Chatfield Watershed Authority ("Chatfield Authority") is pleased to provide its comments regarding the proposed Chatfield Reallocation Draft Environmental Impact Statement ("DEIS") to authorize increasing the water storage capacity of Chatfield Reservoir. The Chatfield Authority is comprised of local governments such as Jefferson and Douglas County, municipalities, special districts and private companies, all of which focus on water quality for the Chatfield Watershed. Water quality standards were adopted to protect the Chatfield Reservoir waters for drinking water supply, recreational, agricultural and aquatic life uses. For more than 20 years, the Chatfield Authority has undertaken water quality monitoring of Chatfield Reservoir and served as a 208 water quality management agency for the Chatfield Watershed. As the 208 management agency, the Chatfield Authority develops programs and plans to achieve the water quality standards, implements the Total Maximum Daily Load ("TMDL") and reviews wastewater treatment facilities, stormwater and nonpoint source projects. Funding for the Chatfield Authority comes solely from its members, so our resources are limited. The Chatfield Authority has collaborated with other interested parties to leverage its funds for projects such as Massey Draw and the Ken Caryl equestrian area streambank stabilization.

The Chatfield Authority has monitored water quality for many years, and has experience in mitigating water quality impacts. The Chatfield Authority's water quality data was used for modeling to project potential water quality impacts associated with the Chatfield Reallocation. Although the Chatfield Authority suggested clarifications and modeling calibrations for early versions of the Chatfield model, we are satisfied that the modeling reflected in the DEIS frames the potential water quality impacts. It notes that the potential impacts from the Chatfield Reallocation are generally short term, especially nutrient impacts which could be mitigated by the Chatfield Reallocation's proposal to clear vegetation along the shoreline prior to inundation. Should water quality impacts occur, they will be addressed by the Chatfield Reallocation through its adaptive management plan.

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The Chatfield Authority has agreed to coordinate with the Chatfield Reallocation on the development and implementation of measures for adaptive management responses to water quality changes. The Chatfield Authority is well suited to work with the Chatfield Reallocation on water quality mitigation. Last, our ongoing monitoring program will provide not only a short term, but also a long term perspective on water quality changes in Chatfield Reservoir, if any occur.

We recognize the need for water storage, especially for junior water right holders so they will have water reserves during the dry years. And given hydrologic variability, all municipal and agricultural water suppliers need storage to get them through drought periods so they are not just relying on the annual rainfalls.

We encourage the Corps to approve the Chatfield Reallocation Project. We will continue to work collaboratively with the Corps, the Colorado Water Conservation Board and the Chatfield Reallocation as this project proceeds.

Respectfully submitted,

CHATFIELD WATERSHED AUTHORITY

Larry Moore, Co-Chairman

Kevin Urie, Co-Chairman

cc: Tom Browning, Colorado Water Conservation Board
Rick McLoud, Highlands Ranch Metro District

City of Aurora

AURORA WATER

Water Department
Administration
Phone: 303-739-7370
Fax: 303-739-7491

Aurora All-America City 2008

August 27, 2012

U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Ms. Gwen Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett,

The City of Aurora, acting by and through its Utilities Enterprise, is writing to support the proposed Chatfield Reservoir Reallocation Project in Colorado, as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe that this project represents a regional water supply opportunity for Front Range and northeastern Colorado water providers.

As you know, the U.S. Army Corps of Engineers ("Corps") has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre-feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control recreation, fish and wildlife habitat, and the reallocation of storage space for the enhancement of water supply yields.

A Draft Integrated FR/EIS on the Chatfield Reservoir Reallocation Project has been prepared by the Corps, in cooperation with the State of Colorado and in consultation with prospective water user groups and many other stakeholders. The water providers who will ultimately contract and pay for the use of the water storage in the reallocated Chatfield Reservoir will agree, under those obligations, to undertake and pay for identified, needed mitigation of environmental impacts as well as modification of recreation facilities, as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills as well as numerous joint letters of support), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as the non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights will prevent the loss of as much as 20,600 acre-feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 acre-feet per year in the South Platte River Basin over the next 40 years. Every opportunity should be made to better use the water we have, along with conservation and reuse efforts. In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference, for some communities, in having enough water to meet their municipal demands.

Aurora Water supports the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reallocation Project and asks that this letter be delivered to the U.S. Army Corps of Engineers to be made part of the record of public comment on this draft FR/EIS.

Sincerely,

Dan Mikesell
Interim Director

City of **Littleton**

Debbie Brinkman
Mayor
Council Member District IV
2255 West Berry Avenue
Littleton, Colorado 80120
303-797-3427

September 5, 2012

Department of the Army, Corps of Engineers
Omaha District, CENWO-PM-AA
ATTN: Chatfield Reservoir Storage Reallocation FR/EIS;
1616 Capitol Avenue; Omaha, NE 68102-4901.

RE: The City of Littleton's Comments to the Chatfield Reservoir Storage Reallocation Draft FR/EIS.

To whom it may concern:

With this letter the City of Littleton, Colorado ("Littleton") is providing its comments to the Draft FR/EIS issued by the Corps of Engineers ("Corps") in June of 2012 concerning the proposed Chatfield Storage Reallocation Feasibility Review / Environmental Impact Statement (Draft FR/EIS).

Littleton's comments can be summarized as follow:

1) Littleton supports the Chatfield Reallocation including in particular the Corps Tentatively Selected Plan (Alternative 3).

2) Littleton is concerned, however, that the Corps did not give sufficient consideration to the potentially significant impacts to aquatic and riparian habitat that will take place immediately below (downstream from) the Reservoir in South Platte Park due to altered Chatfield operations and reduced "base" flows.

3) Littleton believes that such impacts can and should be remedied through more clearly defined "adaptive management" goals aimed at protecting aquatic and riparian habitat through Chatfield operations, and that such goals should be developed in a cooperative and collaborative manner with the "stakeholders," including in particular the Chatfield Participants and affected downstream entities.

By way of background, Littleton is located directly north of Chatfield Reservoir and owns the majority of the South Platte Park (the "Park"), which is a public natural area operated by the South Suburban Parks and Recreation District ("SSPRD"). The Park consists of approximately 885 acres and contains an approximately 2.5-mile stretch of the South Platte River north of Highway C-470. Over the years since Chatfield was constructed, Littleton and SSPRD have worked to create and enhance fish habitat within the Park. To this end, Littleton and SSPRD obtained an in-channel recreational water right in the South Platte River for boat chutes and the development and preservation of the fish habitat in Case No. 94CW273, District Court, Water Division No. 1.[1]

Littleton has been actively involved in the Chatfield Reallocation effort since its inception because of its understanding and belief that not only will the Project Participants benefit from the storage space, but aquatic habitat downstream of Chatfield will also benefit from an improvement in base river flows at important times. Indeed, Littleton believes that the promise of the Chatfield Project is the multiple benefits that can be achieved by this one project, and, to a significant degree, this promise is why the Project continues to receive such broad support.

While Littleton continues to support the Chatfield Reallocation Project, it is concerned that the Corps has not given sufficient consideration to the potential environmental impact that may result under the Corps Tentatively Selected Plan

[1] The Decree awarded a 100 cfs right for boat chute operations and a 30 cfs right from November – March and a 70 cfs right from April – October for preservation of the fish habitat and development of the fish hatcheries for certain boat chute structures located within the Park.

(Alternative 3). Specifically, Littleton is concerned that the potential impacts to aquatic and riparian habitat immediately downstream of Chatfield in the Park have not been adequately addressed.

The Draft FR/EIS recognizes that the critical stressors for aquatic biota downstream of the reservoir are: (1) "stress during late summer months from increased water temperatures and decreased flow" and (2) "base flow conditions during the winter months." Draft FR/EIS at 4-51 and 4-52. Notably, both situations, particularly winter base flow conditions, recognize that aquatic life is stressed by low flow conditions that result in warmer water (during the summer) or little or no water (during the winter). It follows that exacerbation of already low flows through further flow reduction could result in harm to aquatic life downstream of Chatfield.

The Draft FR/EIS, however, dismissed downstream impacts to aquatic biota as "insignificant" largely, if not entirely, as a result of the analysis of *the average monthly flow data* depicted in Figure 4-12 in the Draft FR/EIS. A copy of Figure 4-12 is attached, and depicts both monthly average flows during the study period and the expected change to that monthly flow if the Tentatively Selected Plan (Alternative 3) is implemented. From this data the Corps concludes, without elaboration, that the up to 5% reduction in *average monthly* flows that will take place 9 months of the year (and nearly 10% reduction in flows in February) constitute a "minimal" change with an "insignificant" impact on aquatic biota, while the less than 5% increase that will take place in the single month of July "would have a positive effect on aquatic biota downstream of the reservoir." Draft FR/EIS at 4-51. What is puzzling to Littleton is not just that these

conclusions seem potentially incongruous, but that any definitive conclusions can be derived at all from average monthly flow data considering that the exacerbation of low flow conditions is the primary stressor for aquatic life downstream of Chatfield. The Corps recognizes this elsewhere in the Draft FR/EIS. On page 5-20 of the Draft FR/EIS it states:

> The hydrologic modeling was developed to predict flood levels at relatively large timeframes (e.g., months and years versus days and hours). Therefore, the predictions that mean monthly discharges from the Chatfield Dam would be minimal may mask the more detailed data that would indicate that substantial decreases in flow may be reached for specific days or hours of the day. This more detailed data may show that there are times when daily discharge rates may be impacting flows immediately downstream from Chatfield Reservoir. ...

The correlation between this average monthly flow data and potential harm to aquatic life in the Park becomes even more tenuous when it is considered that this data comes from measurements taken at the Denver Gauge, which is located approximately 15 miles downstream from Chatfield Reservoir. Several tributaries flow into the South Platte River downstream of the Park and upstream of the Denver Gauge, including significant tributaries such as Bear Creek and Cherry Creek, that obscure any meaningful connection between the data presented in Figure 4-12 and environmental impacts in the Park.

Perhaps based upon the inherent disconnect in using average monthly data to develop conclusions concerning low flow impacts, the Corps arrives at inconsistent conclusions in the Draft FR/EIS concerning winter base flows. On page 4-52 of the Draft FR/EIS is a paragraph that states:

> Based on the Corps' modeling results, the projected change during winter base flow conditions would result in a slight decrease that would result in minimal or no impact to aquatic biota present. Appendix D, prepared by Great Western Institute et al., includes additional modeling and evaluation of wintertime flows in the South Platte River under various water release scenarios from Chatfield Reservoir. These analyses indicate that the proper management of outflow from the Chatfield dam to the South Platte River by maintaining a minimum of 10 cfs could greatly improve the habitat available for fish in this downstream reach.

The Corps own modeling, as well as that of the Great Western Institute, indicate that under Alternative 3 we can expect additional days when Chatfield flows are reduced below 10 cfs. (Appendix D and Appendix CC). This reduction in flow will, according to the statement above, have minimal or no impact to aquatic biota while at the same time proper management of releases to achieve a minimum of 10 cfs could "greatly improve" fish habitat. It is difficult to see how both statements can be true.[2]

Regardless, Littleton agrees with the Corps that "[m]anaging the release of water from Chatfield Reservoir could be an important tool" for enhancing fish and riparian habitat downstream of the reservoir. Draft FR/EIS at 4-55 and 4-56. This is why Littleton has been and continues to be in support of this Project. The problem from Littleton's standpoint, however, is that in the Draft FR/EIS the management of the Reservoir with any thought of downstream flow impacts appears to be purely voluntary, being only vaguely referenced as a matter to be addressed through "adaptive management." When considering the environmental and recreational benefits provided by South Platte Park, as well as the financial commitment that Littleton has made to

[2] It should also be noted that the Great Western Institute et al. study cited did not point to 10 cfs as a low flow goal for aquatic biota but rather as a potentially achievable flow rate under Alternative 3.

creating and protecting aquatic habitat in the Park, Littleton is concerned that aspirational goals alone are not sufficient to address the potential significant environmental harm.

For all of these reasons, Littleton respectfully requests that the Corps give further consideration to the downstream impacts of reallocation on the environment and in particular the aquatic and riparian habitat immediately downstream of Chatfield in South Platte Park. Littleton believes that these impacts are potentially significant and the Corps should consider including the mitigation of such impacts as one of the "core objectives" in the Compensatory Mitigation Plan.

Additionally, the Draft FR/EIS states adaptive management will be used to "evaluate conditions and minimize potential impacts." It is unclear, however, how (or even if) adaptive management will be utilized to remedy downstream impacts that do occur. Littleton recommends that in the Final FR/EIS the Corps make clear how adaptive management will be applied to minimize downstream environmental impacts and describe the objectives of the adaptive management process.

In this regard, Littleton believes that the best way to develop a sensible and workable adaptive management process with realistic but meaningful goals is for the Corps to work with the Chatfield Project Participants and the affected downstream communities to develop cooperative, mutually agreed upon strategies for Chatfield Reservoir management that meet the goals and needs of the Chatfield Participants while addressing stream base flow deficiencies.[3] Indeed, a potential framework for the

[3] Concerning the development of minimum or "base flow" requirements below Chatfield for fish habitat, Littleton notes that significant ground work has already been done to

discussions of such "operational solutions" already exists. In 2005 certain Chatfield Participants entered into discussions with entities interested in downstream flow concerning using water stored in Chatfield to meet minimum stream flow goals. Discussions in this group progressed to the point that a final agreement was reached and drafted (though never fully executed). Littleton is hopeful that through the EIS process such discussions can be revived and perhaps expanded and a similar cooperative solution incorporated into the Final EIS.

Thank you for the opportunity to provide comments to the Draft FR/EIS.

Sincerely,

Debbie Brinkman
Mayor of Littleton

---

model for minimum flow requirements. In particular, in 1991 W.J. Miller & Associates prepared "A Minimum Flow Study of The South Platte River, Downstream of Chatfield Reservoir" that found that a minimum flow of 30 cfs would not significantly reduce habitat from that found at higher flows. If the Corps is not aware of this study Littleton would be happy to provide it.

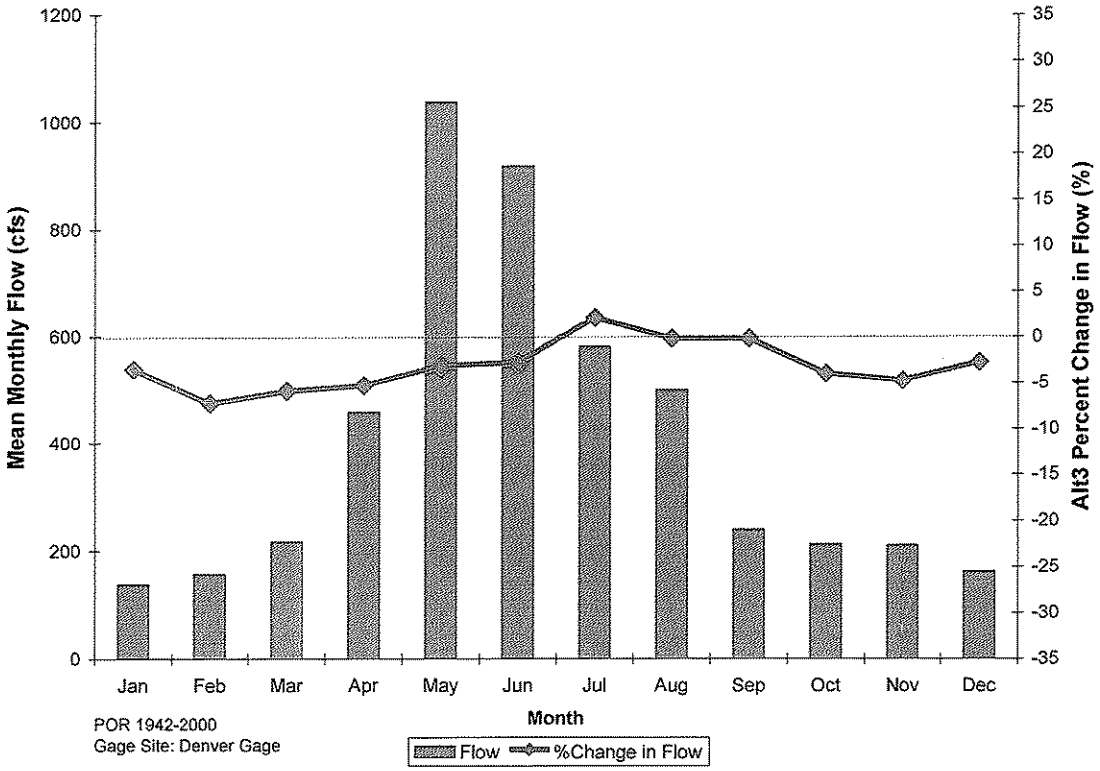

Figure 4-12
Percent Change in Flow from Baseline in the South Platte River Below Chatfield Reservoir if Alternative 3 Were Implemented

CITY OF LONE TREE

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July 17, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The City of Lone Tree, Colorado (City) supports the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The City understands that the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

The City further understands that a Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

The City supports the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and directs that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

James D. Gunning
Mayor

STATE OF COLORADO

OFFICE OF THE EXECUTIVE DIRECTOR
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, Colorado 80203
Phone: (303) 866-3311
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COLORADO
DEPARTMENT OF NATURAL RESOURCES

John W. Hickenlooper
Governor

Mike King
Executive Director

Gwyn M. Jarrett, PMP
CENWO-PM-AA
1616 Capitol Avenue
Omaha, NE 68102-4901

RE: The Chatfield Reservoir Reallocation Draft Environmental Impact Statement

October 4, 2012

Dear Ms. Jarrett:

Thank you for the opportunity to comment on the United States Corps of Engineers' Draft Environmental Impact Statement for the Chatfield Reservoir Reallocation Project ("DEIS"). The following comments have been submitted from the Colorado Department of Natural Resources (DNR) and it's Divisions. These Divisions include the Colorado Water Conservation Board (CWCB), and Colorado Parks and Wildlife (CPW).

Colorado Water Conservation Board Comments

This letter is in response to the U.S. Army Corps of Engineers' (Corps) published Notice of Availability of the Draft Feasibility Report and Environmental Impact Statement (FR/EIS) for the Chatfield Reallocation Project in the *Federal Register*. It is our understanding that the Corps taking public comment on the Draft FR/EIS through September 6, 2012. The Colorado Water Conservation Board (CWCB) is pleased to submit the following comments.

Overview

The CWCB has had an important long-term role in the development of the Draft FR/EIS, and serves as the non-federal project sponsor pursuant to a feasibility cost-share agreement with the U.S. Army Corps of Engineers. The CWCB's statutory duties include promoting the greatest utilization of water and working with water providers on the conservation and development of the waters of the state. The CWCB supports the proposed project, and recognizes that one of its tremendous features is to make use of an existing federal reservoir in lieu of constructing an entirely new on-stream reservoir.

Colorado's Water Supply Planning Process

Colorado has a robust water supply planning process based on local basin planning. In 2003, because of Colorado's population increase, the 2002 drought, and potential water shortage issues, the Colorado General Assembly authorized CWCB to implement the Statewide Water Supply Initiative (SWSI). Senate Bill 03-110 authorized SWSI which implemented a collaborative approach to helping Colorado maintain an adequate water supply for its citizens and the environment. SWSI focused on using a common technical basis for identifying and quantifying water needs and issues throughout the state. SWSI formed the basis of Colorado's current water supply planning process.

In 2005, the Colorado General Assembly formalized this statewide water supply planning process through the Colorado Water for the 21st Century Act (C.R.S. 37-75-101 to -107). The Colorado Water for the 21st Century Act, now known as the Basin Roundtable Process, provides a permanent forum for basin level water supply planning. It incorporates and extends SWSI by creating 9 Basin Roundtables based on Colorado's eight major river basins and a separate roundtable for Denver Metro area.

Each Basin Roundtable is charged with developing a basin-wide water needs assessment by analyzing their consumptive (M&I and agricultural) water needs, nonconsumptive (environmental and recreational) water needs, and available water supplies. They are also proposing projects and methods to meet their identified water needs.

SWSI Findings

The SWSI 2010 report indicates that by 2050 Colorado's population will double to roughly 10 million people. About half of this population growth is expected to be due to net migration into the state and the other half due to birth rates exceeding death rates. This growth will create the need for roughly as much as 800,000 acre-feet of municipal and industrial (M&I) water. The South Platte and Denver Metro areas, which could be served by the Chatfield Reallocation project, are projected to need on the order of 300,000 to 500,000 acre-feet of additional M&I water. A significant amount of this could be met through the successful implementation of projects and planning processes that the local water providers are currently pursuing, also called Identified Projects and Processes, or IPPs.

The Chatfield Reallocation Project is one of many IPPs. SWSI found that even if all the IPPs are 100% successful there would still be an unmet need, or water supply "gap." To the extent that the IPPs are not successful the "gap" is obviously larger. SWSI also found that to the extent the IPPs are not successful, Colorado will see a much greater reduction in irrigated agricultural lands as M&I water providers seek additional permanent transfers of agricultural water rights to provide for the demands that would otherwise have been met by specific IPPs.

Upon completion of SWSI the Colorado Water Conservation Board recognized the importance of successfully implementing the IPPs. They adopted the mission statement to "Track and Support Water Supply Projects and Planning Processes."

By 2050, the population is projected to be between 5.8 and 7.1 million people in the South Platte Basin, including the Denver Metro area. This is an increase of 2.5 to 3.8 million people from the basin's 2005 population. Within the South Platte Basin, population will be concentrated in the Denver Metro Area. The largest county populations are projected to be in Adams, Arapahoe,

Denver, Douglas and Jefferson Counties. Current and future water needs in the high population areas are substantial.

Identified Projects and Processes

Colorado's water supply planning process has concluded that meeting our state's water supply needs will require a mix of successful IPPs, additional conservation, agricultural transfers, and new water supply development. There is no "silver bullet" solution for our future water needs, and relying solely on any one strategy will not have a favorable result. Even with the successful implementation of the IPPs, Colorado will still have a water supply "gap." Additionally, Colorado will not be able to meet all of its future water supply needs through conservation alone, nor should Colorado rely solely on one or two large water projects.

A significant portion of Colorado's future needs will be met with the implementation of projects and planning processes that the local water providers are currently pursuing. Further, there is growing concern about the continued use of non-tributary groundwater for M&I purposes in the southern portion of the Denver Metropolitan area. Sustainable surface water supplies through projects such as Chatfield Reallocation are critical for reducing demands on non-renewable water sources contained in deep groundwater aquifers.

If successfully implemented, major IPPs in the South Platte Basin and Denver Metro Area that are currently in the NEPA process could yield an average of about 113,000 acre-feet of water. These projects include:

- Moffat Collection System Improvement – 18,000 a.f.[1]
- Windy Gap Firming – 30,000 a.f.[2]
- Northern Integrated Supply Project (NISP) – 40,000 a.f.[3]
- Halligan-Seaman Reservoir Enlargements – 17,000 a.f.[4]
- Chatfield Reservoir Storage Reallocation – 8,000 a.f.[5]

However, these proposed water supply projects will only meet a portion of the total need. The remainder will need to be met through conservation efforts, local agricultural water transfers, and potential new water supply development projects above and beyond the IPPs. To the extent that water projects (IPPs) developed by local water providers do not move forward, different water projects will need to be considered. If the IPPs fail to move forward, alternative projects may be needed sooner and in larger configurations.

The CWCB has also worked with the IBCC and Basin Roundtables to develop "portfolios" or combinations of strategies for meeting Colorado's water supply needs. The "status quo" portfolio is just one of many that were developed, but it would lead to dry-up of large amounts of irrigated lands in the South Platte and Arkansas River Basins. The CWCB, IBCC and many water stakeholders throughout the state are concerned that this level of agricultural dry-up will have detrimental impacts to Colorado's economic diversity, cultural heritage, rural economies, and wetlands/riparian habitat. Again, it is critical that IPPs such as Chatfield Reallocation can move through the permitting process for implementation.

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[1] An estimated firm-yield based on 1950-1991 hydrology.
[2] An estimated firm-yield basis based on 1950-1996 hydrology.
[3] An estimated firm-yield basis based on 1950-1996 hydrology.
[4] An estimated firm-yield basis based on synthetic hydrology.
[5] An estimated average annual yield.

Conclusions

The U.S. Army Corps of Engineers has been working with the State of Colorado and roughly a dozen water entities who are seeking a portion of the proposed storage space based on a recommended alternative for reallocating 20,600 acre-feet in the reservoir. Chatfield Reallocation can be accomplished through robust on-site and off-site environmental mitigation as well as sensible modifications to the existing recreational facilities at Chatfield State Park. All of this would be accomplished with no need to enlarge the existing dam or spillway.

Our basin-wide and state planning efforts indicate that the extent to which local water providers' projects are not successful, the state's overall M&I water supply "gap" is larger. Conservation and agricultural water transfers will be critical in meeting our future water supply needs, but they will not eliminate the need for new water supply development projects. If projects such as Chatfield Reallocation and other IPPs are not successfully permitted, then alternative water supply projects will need to be developed, perhaps at much higher costs and with more environmental challenges.

Overall, the CWCB has a keen interest in tracking reasonable projects developed by local water providers. In the case of Chatfield Reallocation, the CWCB has a vested interest in seeing a successful outcome. It is well understood that that impacts will result from any major water supply project. These impacts will need to be identified, minimized, and mitigated through the NEPA process and the State's own mitigation planning process (C.R.S. 37-60-122.2). Failure to move forward on reasonable, common sense projects such as Chatfield Reallocation will only create bigger and more difficult problems in the future. Many in the water community have stated that Chatfield Reallocation involves a highly inclusive process using a transparent and collaborative approach to project permitting.

Colorado is facing a challenging water supply future. In order for the state to continue ahead with a strong and diversified economy, it is imperative that a combination of conservation, agricultural transfers, identified projects, and new water supply development takes place. All strategies will be critical in meeting our future needs.

Colorado Parks and Wildlife Comments

This letter presents the comments of the Colorado Division of Parks and Wildlife ("Parks and Wildlife") on the United States Corps of Engineers' Draft Environmental Impact Statement for the Chatfield Reservoir Reallocation Project ("DEIS"). We appreciate this opportunity to provide these comments and hope you will find them useful in evaluating the potential impacts and benefits of allocating additional water storage in this reservoir. Parks and Wildlife is a division of the Colorado Department of Natural Resources organized for the purpose of protecting, preserving, enhancing and managing Colorado's natural, scenic, scientific and outdoor recreation areas, including Chatfield State Park, as well as its wildlife and environment for the use, benefit and enjoyment of the people of Colorado and its visitors. The reallocation of any additional storage space within Chatfield Reservoir (the "Reallocated Space") will directly impact one of Colorado's most popular recreational areas, Chatfield State Park, as well as its associated environment. Its close proximity to both the Denver Metro area and the foothillsprovides a valuable and unique opportunity for the public to connect to the natural world through fishing, camping, boating, hiking, biking, horseback riding and wildlife viewing. It is a vital component of the Colorado Parks & Wildlife system, attracting 1.6 million visitors annually. Further, the South Platte River and its associated riparian corridor, particularly that

portion located downstream of Chatfield Reservoir, also provides valuable aquatic habitat and recreational opportunities in metropolitan Denver.

Parks and Wildlife is actively involved in the Reallocation Project (the "Reallocation") and supports the Chatfield Water Providers' objectives. At this juncture, it is our opinion that additional information and mitigation measures be provided prior to approval of the Reallocation. Our specific comments on the DEIS are as follows.

1. **In addition to any mitigation imposed by the DEIS, the Chatfield Water Providers are required to obtain and implement a Fish and Wildlife Mitigation Plan that is approved by the State of Colorado.**

Colorado state law requires the Chatfield Water Providers to apply for, obtain and implement a Fish and Wildlife Mitigation Plan pursuant to the process outlined in C.R.S. § 37-60-122.2. We ask that this requirement be contained in the Record of Decision as a condition of the Corps' approval of the Reallocation. This approach was recently followed in the Corps' approval for the Southern Delivery System Project, which is located in the Arkansas River Basin.

2. **Significant amount of the impacts to environmental assets and recreation are a result of the expected increase in reservoir fluctuations, and the change of timing of storage and release. A solid mutually agreed upon Coordinated Reservoir Operations Plan could dramatically decrease these impacts and the magnitude of impacts. Such a plan could decrease mitigation costs and increase certainty for the Water Providers, CPW and the Environment.**

   A relatively high, stable water level is necessary in order to maintain the quality of the recreational experience at Chatfield State Park as well as the existing fish and wildlife habitat, particularly during the summer season. In recognition of this fact, Denver Water (the only entity currently allowed to store and release water from Chatfield Reservoir) and the State of Colorado entered into an agreement in 1979 that governs Denver's ability to store and release water from its allocated storage space (i.e., between elevations 5,423 and 5,432 feet). This contractual arrangement is extremely important to Parks and Wildlife as well as the operation of Chatfield State Park. We strongly suggest that the tenants of this agreement remain intact..

   We would like to see more detail regarding how the Water Providers will store and use the water in Chatfield Reservoir specifically;

   - How will evaporation losses be allocated between Denver Water and the Chatfield Water Providers?
   - Who will bear the loss of any storage space caused by sedimentation?
   - How will the storage operation by the Chatfield Water Providers in the Reallocated Space be coordinated with the existing Denver Water storage operation?

Chatfield Reservoir typically fluctuates no more than 5 feet in elevation from Memorial Day to Labor Day. Reservoir fluctuations over this same time period with the approved Reallocation under Alternative 3, could increase up to 17 vertical feet, which in turn greatly increases the horizontal distance to the water from proposed relocated recreational facilities, shade trees and parking areas. We believe that a coordinated operations plan would greatly assist in helping to offset the potential impacts associated with said water level fluctuations. If such a plan could

help mimic current reservoir water level fluctuations during the same time frame it would help preserve a similar recreation experience and the existing fish and wildlife. This Coordinated Reservoir Operations Agreement will help ensure that a functionally equivalent recreational experience and preserve the existing fish and wildlife habitat. This Agreement should require maintenance of a relatively stable water level.

The draft Reservoir Operations Plan in the Compensatory Mitigation Plan is a start but more specificity is needed to protect the quality of recreation at Chatfield State Park or preserve the existing fish and wildlife habitat. We believe the draft Reservoir Operations plan does not specifically address operations to mitigate the potential increase in low flow or zero flow days below the reservoir that may occur due to the Reallocation. It also appears to allow the Chatfield Water Providers to withdraw water without regulation for at least the first three years. The draft Reservoir Operations Plan contemplates operations whereby Denver Water would use its existing senior water rights and decreed exchanges to store water in the Reallocated Space to help maintain reservoir water levels and yet there would be "no expectation as to how or when the water is withdrawn." We agree that use of Denver Water's resources could help maintain desired water levels. However, the use of Denver's senior water rights within the Reallocated Space and flow when it is withdrawn may impact the Chatfield State Fish Unit ("SFU") and its junior water rights and downstream aquatic resources. We ask that you provide additional information as to how this concern may be alleviated or mitigated. Again, a solid and mutually agreed upon operations plan is key to addressing a high number of impacts in the most cost effective and efficient manner.

3. **We desire clarification regarding the analysis of the Upstream, In-Reservoir and Downstream Impacts.**

We are having difficulty determining the nature and magnitude of the upstream, in-reservoir and downstream impacts because we believe the described hydrology (Appendix H) does not incorporate the complex portfolio of water rights that may be stored in the Reallocated Space by the current project participants or the means by which that water will be released for its end use. Parks and Wildlife acknowledges, at the outset, that the Chatfield Water Providers will need both short and long term flexibility to obtain the most benefits from the Reallocated Space. Again, we emphasize that a coordinated reservoir operations plan using a strategy to mimic current reservoir water level fluctuations would greatly assist in offsetting potential impacts of this project.

The hydrologic modeling in Appendix H for the project provides a simplified view of the potential changes that is based on assumptions that we believe may not be accurate. For example, the hydrologic modeling evaluation includes the City of Brighton as a downstream user even though Brighton's share (appx. 7% of the project) has since been acquired by an upstream user (largely, Centennial Water and Sanitation District); and, therefore, water that would have been passed through downstream by Brighton will now be taken out upstream of the reservoir by Centennial. Therefore, the model assumes a significant portion of the reallocation storage water would be passed downstream when in fact it may not. The model also appears to assume that all downstream water users will use the South Platte River as a conveyance structure for the life of the project. We are unclear if this assumption is currently up-to-date and ask that you clarify this assumption. We also would like to know if the Chatfield Water Providers will be able to lease their storage space to other water users or administratively exchange their water with other water users (such as Denver Water) and, if so, how might that temporary change impact flows below Chatfield Reservoir?

We also have a concern that the definition of water rights for water stored in the reallocated space is unclear. The DEIS begins by stating that the Chatfield Water Providers will store junior, presumably native, water rights. However, the draft Reservoir Operations Plan provides for the potential use of Denver Water's storage and exchange rights within the Reallocated Space. The origin (i.e., native versus transmountain water rights) and priority of the water rights stored in the Reallocated Space is critical in determining the nature and scope of upstream, in-reservoir and downstream impacts caused by the Reallocation. We believe that this information would greatly assist in determining whether the impacts have been correctly identified and the proposed mitigation measures are sufficient.

We provide the following example for your consideration: We believe Denver Water's use of its senior right in the Reallocated Space may jeopardize the operation of the Chatfield State Fish Rearing Unit and potentially downstream flows. Denver Water is not part of the Chatfield Water Provider entities and impacts due to the exercise of Denver's water rights and decreed exchanges were not evaluated in the DEIS analysis. We think that a detailed list of the specific water rights (i.e., native and transmountain water rights with their associated priority) that the Chatfield Water Providers intend to store in the Reallocated Space and when/how that water will be released to each end user would help to evaluate potential impacts associated with the reallocation. However, a solid operations plan would likely avoid the need for detailed water rights disclosure.

Upstream Impacts:

The DEIS describes the intermittent inundation of a 0.69 mile reach of the South Platte River above Chatfield Reservoir as a result of the Reallocation, and that the inundation could result in changes in the aquatic habitat of that reach. We believe that inundation of the upstream reach, even intermittently, will almost certainly result in permanent changes negatively impacting stream fishing recreation in this area on Chatfield State Park. This section of the river provides important river fishing opportunities for trout within the Park. The fluctuation in reservoir elevations under Alternatives 3 and 4 will negatively impact the riverine habitat, deposit sediments on the river gravels and may lead to a loss over time of trout habitat in this section of the river. We believe that clarifying the expected water level fluctuations related to the reallocation operations will help identify the magnitude of these potential impacts and the appropriate means of mitigation.

In-Reservoir Impacts:

The DEIS, and more specifically the Recreation Facilities Modification Plan in Appendix M, seems to make it clear that the overall goal of the Chatfield Recreational Modifications is to continue to provide visitors with the same recreational experience following the storage of up to an additional 20,600 acre-feet of water within the reallocated space (5432'-5444'). The Recreational Modification Plan covers most of the facilities within Chatfield State Park but there are still several issues that will need to be discussed and added that will in turn affect the overall cost of the modifications presented in the DEIS. From a recreational standpoint, Parks and Wildlife's largest outstanding concerns are making sure that the public understands that the relocated recreational facilities may often be located a considerable distance from the physical water level and that the 587 acres of land that is intermittently inundated with water stored in the Reallocated Space will become unusable for recreation.

The DEIS states the "average year yield" for the collective 15 water users is 7,000 acre-feet using a period of record from 1942-2000. An "average year yield" does not mean that 7,000 acre-feet of water will be stored in the Reallocated Space each year; rather, it is simply an

average. It is unclear how much water will be stored in the Reallocated Space during a wet, normal or dry year. We believe that a coordinated reservoir operations plan could be used to help offset related impacts and address a range of concerns including:

- In a drier year such as 2012 or normal year, will the Reallocated Space be empty or do the Chatfield Water Providers intend to store more senior or transmountain water rights that may come into priority?
- If a particular Chatfield Water Provider does not have water to fill their portion of the Reallocated Space, may they lease that space to another entity with more senior water rights?
- How long will water be stored in the Reallocated Space by each of the Chatfield Water Providers?
- Do the Chatfield Water Providers need to use their water during the summer months?
- How much water do the Chatfield Water Providers anticipate releasing (either downstream or through an off-channel diversion facility) on a daily, weekly and monthly basis?

With regard to aquatic species in Chatfield Reservoir, such species could be harmed by the increased erosion, fine sediment and water quality changes caused by the storage of water within the Reallocated Space and increased water level fluctuations. The water quality analysis presented shows mercury to have exceeded water quality standard in 2004 and it was assumed to be the result of sediment from the Hayman fire. With the increased fluctuation predicted for the reservoir and the increased sedimentation due to erosion and the inundation of vegetation along the fluctuation lines, the increased possibility for methylation of mercury may occur. As vegetation decomposes and depletes or lowers the oxygen, mercury will become available to reservoir food chain. Currently, mercury levels found in fish tissue are well below the advisory level but as water quality changes occur with reservoir fluctuation, the potential for mercury levels in fish will increase. Studies have also shown that reservoir fluctuation has a negative influence on gizzard shad populations, the primary food source for walleyes. With potential decreases in shad populations, walleyes would shift to crayfish as a primary food source. Crayfish are known to be the primary link for mercury into the food chain; therefore, an increase in the utilization of crayfish in the walleye diet may lead to having to mitigate mercury. The Reallocation may also negatively impact other water quality parameters as well, which include, but are not limited to, phosphates, nitrates and dissolve oxygen. Adequately addressing these quality issues and ensuring water quality does not degrade will benefit the Water Providers as well as the environment. Prevention is a cost effective alternative to mitigation. These potential impacts could be appropriately addressed through adaptive management. Finally, the possibility of introducing aquatic nuisance or invasive species from surrounding positive areas, such as the Eurasian watermilfoil from the third gravel pond south of the reservoir (aka Cigar Pond), will be increased during a 10 year flood event.

Increased water level fluctuations dependent of timing may also impact species such as walleye and smallmouth bass that are two of the primary sportfish species anglers pursue at Chatfield Reservoir. Chatfield Reservoir's walleye spawning program produces 30-40 million eggs annually, and will be negatively impacted if storage of water within the Reallocated Space results in larger or more frequent water level fluctuations during the spawning season. Additionally, the smallmouth bass fishery is supported by natural reproduction which will be negatively impacted by more significant water level fluctuations during the spawning season, if dropping water levels dry up smallmouth bass eggs. Increased fish migration out of Chatfield Reservoir could result from more frequent and significant reservoir fluctuations. Chatfield Reservoir was required to move a large volume of water in the spring of 2006, which was

completed at the same time as the walleye in the lake were staging to naturally spawn in the area along the dam face. This large movement of water naturally attracts these fish looking for suitable habitat to spawn or reproduce. The end result was the loss of approximately two-thirds of the adult walleyes out of the reservoir. This not only impacted the reservoir fishery for the angling public, but it also had a lasting impact on the State's ability to secure enough walleye eggs that supports not only walleye populations in Colorado, but many other states. It took four years for the adult walleye population to return to the same level that produced the needed number of eggs and walleye population age structure. Smallmouth bass, supported entirely by natural reproduction, is another important sport fish in Chatfield that is very dependent on stable reservoir levels from mid-May to the first of July to sustain the fish population. A coordinated reservoir operations plan with Denver Water has helped to manage the Chatfield Reservoir, and a separate, but similar plan with the Water Providers would continue to help maintain the levels in the reservoir to continue to provide recreational fishing experiences.

Downstream Impacts:

We are concerned that the analysis of downstream flows may be inaccurate if a primary assumption is that each downstream user will always convey its water through the South Platte River, as opposed to through a pipeline, off-channel conveyance structure or by an administrative exchange or trade of water. The DEIS uses the Denver and Henderson gages to gather historical flow data, even though these gages are located a significant distance below Chatfield Reservoir. These gages are also located below two significant South Platte tributaries (Bear Creek and Cherry Creek), which add water to the river. Thus, we are concerned that the hydrologic modeling does not accurately characterize the changes in streamflow that will occur immediately below the reservoir.

We are concerned that the hydrologic modeling seems to rely heavily on a synthetically reproduced hydrology. It appears that actual historic releases of stored inflow data from Chatfield Reservoir are not assessed and that the releases stored water versus non-flood inflows passing through the reservoir are not factored into the analysis. If this is case, this may suggest that decreases in flow will be greater than what the model predicts, which will result in decreased water quality downstream of Chatfield Reservoir.

The DEIS evaluates changes in annual and mean monthly flows to analyze impacts to downstream flows. We feel a more accurate assessment of impacts could be gained by evaluating changes on a daily and weekly basis. We recommend utilizing daily or weekly time-step information from the Chatfield stream gage, which is located immediately downstream of the reservoir. We are concerned that future operations that drop streamflows below current levels could impact the Chatfield SFU and downstream aquatic resources.

The DEIS predicts reductions in streamflow below Chatfield Reservoir due to the Reallocation in the fall and winter months (Figure 4-12). Currently flows can and do fall below acceptable levels during these periods, and the South Platte River just below the reservoir is frequently dried up. We believe that if further flow reductions occur it will result in additional impacts including but not limited to loss of aquatic life (fish and invertebrate) and potential negative water quality impacts that could reach downstream until additional untreated water is added to the river channel and reduced recreational opportunity. We agree that some of the sportfish found downstream of the reservoir are more typically found in standing water but want to also emphasize that rainbow and brown trout are year round residents in streams with more consistent stream flows, species such as smallmouth bass and walleye could also become year round residents. The reach of river extending from Chatfield Dam to Confluence Park is a very

popular angling recreation area; additionally there is interest in a collaborative effort to enhance the recreational use in this stream reach.

The DEIS states that impacts are not anticipated to the Chatfield State Fish Unit located downstream of the Reservoir. We would like to see an analysis of how a coordinated reservoir operations plan will support this claim. We believe this can be accomplished as referenced above by using the daily and weekly flow changes at the Chatfield Stream gage rather than monthly and mean annual streamflows at the Denver and Henderson stream gages. Again, a Coordinated Operations Plan would help address the impacts in the most cost effective manner. Parks and Wildlife agrees with the assertion in Appendix D (Ecosystem Restoration Evaluation Report) that maintaining a minimum release of 10 cfs could greatly improve downstream habitat. We strongly support incorporating this minimum flow in a coordinated operations plan to protect the Chatfield SFU and downstream aquatic resources. CPW will continue to work closely with the stakeholders in their development of an operations plan that maintains and/or enhances the downstream aquatic resources.

4. **Adaptive Management may be applied too broadly for mitigation, particularly where impacts are readily identifiable. There must be a more structured, concrete approach to mitigating identifiable impacts.**

We are concerned that the adaptive management approach explained in the Draft Operations Plan within the Adaptive Management Section (7.5.2.1) of the Compensatory Mitigation Plan (Appendix K) (the "CMP") is not sufficient to mitigate the identified impacts. The CMP identifies the Chatfield Water Providers as the only stakeholders. We feel that the CMP should identify other potential stakeholders that may potentially be impacted by the mitigation. We think that adaptive management is applied too broadly and would be more beneficially applied to mitigate those impacts that are uncertain, either in their occurrence or degree of severity. For example, adaptive management is not an appropriate tool to use to mitigate the adverse impacts to walleye spawning caused by reservoir releases because concrete steps can be taken to limit the drawdown rate during known spawning periods. On the other hand, adaptive management can and should be used as a tool to mitigate potentially unknown water quality impacts and the loss of cottonwoods. Adaptive management increases uncertainty for all the Stakeholders, it is in everyone's bests interest to identify tangible mitigation everywhere possible. We would like to see adaptive management that consists of a developed plan that includes specific benchmarks or desired conditions as criteria to measure whether the mitigation is successful, as well as alternatives for mitigation should the initial attempt fail.

5. **We believe that the DEIS and associated Recreation Modification Plan may underestimate the impacts to recreation at Chatfield State Park and potentially the costs associated with the mitigation that will be necessary to maintain a functionally equivalent recreational experience.**

The DEIS and associated Recreation Modification Plan appear to identify the nature of most of the impacts to recreational facilities within Chatfield State Park that will need to be mitigated. However, we feel the magnitude of those impacts has been underestimated, which in turn, may have caused certain costs of the proposed modification to be underestimated. We believe that it would be helpful for the DEIS and associated Recreation Modification Plan to further investigate the magnitude of these impacts, include these additional costs and provide for their continued funding for the duration of the project.

We suggest that the Document identify ways to fund the additional costs incurred at Chatfield State Park throughout the entire duration of the project. Most of the direct effects on recreation

will occur at Chatfield State Park along with a significant amount of the related costs. Chatfield Reservoir typically fluctuates less than 5 feet in elevation from Memorial Day to Labor Day, which means that recreational facilities, shade trees and parking areas are located in close proximity to the water. If the reallocation project is approved, reservoir fluctuations over this same time period could increase up to 17 vertical feet. Facilities will have to be relocated, significantly increasing the horizontal distance to the water from recreational facilities, shade trees and parking areas. Visitors using the reservoir will have to travel farther from the water to the restrooms and parking areas during periods of low water (i.e., when the Chatfield Water Providers are storing little to no water in the Reallocated Space). Initial costs will include replacement of facilities, trails, roads and infrastructure at a functionally equivalent level. For example, if Chatfield State Park now has 21 feet of exposed boat ramp at the North Ramp from the height mark of 5432 ft., then after modifications the Park should continue to have 21ft of exposed boat ramp from the high water mark of 5444. Otherwise, many of the relocated recreational facilities will be more vulnerable to flood events and subject to additional temporary closures because these facilities will be constructed within the 10 year floodplain. In addition, Chatfield State Park will be required to increase its daily, weekly and monthly operation and maintenance of those facilities to adjust for the fluctuations in water levels.

Chatfield State Park, and perhaps its concessionaires, will also experience a loss of revenue from decreased visitation; first during the initial mitigation process and later as a result of less usable Park land and watchable wildlife, and more closures of Park facilities located within the 10 year flood plains. We appreciate that the DEIS clarifies that the Water Providers will be financially responsible for lost revenue and increased operational and maintenance costs. We strongly suggest that, an explicit term and condition should be included in the ROD requiring the Chatfield Water Providers to reimburse Parks and Wildlife for all lost revenue and increased operational and maintenance costs throughout the life of the project. A detailed operational and maintenance mitigation plan specifically outlining the types of lost revenues and increased costs that will be reimbursed by the Chatfield Water Providers as well as the process for obtaining reimbursement should be included.

One of the most significant impacts of the Reallocation on visitors to Chatfield is the loss of approximately 587 acres of recreational land and wildlife habitat. This area is considered "lost" because it will be intermittently inundated with water stored in the Reallocated Space and is anticipated to be a large mudflat the remainder of the time. In addition, the reallocated storage space and more specifically the 587 acres of upland area is located at an elevation with more gentle topography, creating shallow water levels with increased boating hazards. Consequently, no additional boatable acreage for motorized vessels is expected to be created within Chatfield Reservoir making these acres a net loss for recreation and wildlife habitat and decreasing the opportunity for viewing wildlife when there are increasing demands for this recreational activity. The DEIS does not clearly define mitigation for the loss of the 587 acres of upland area within Chatfield State Park and opportunities for watchable wildlife. Additional recreational land may become unusable for recreational purposes, including wildlife watching, if proposed borrow pit areas are too large or improperly restored. It is important that loss will be mitigated and/or offset.

We would like to see a few other recreational issues at Chatfield State Park addressed such as the large mud flats (potentially up to 587 acres) that would be created and the associated overall management of the Reallocated Space to include weed and mosquito control, public access issues, erosion control on the cliffs, loss of the tree canopy and the overall aesthetics of the area. In addition, the DEIS should also address the Marina in more detail since the proposed fluctuation from the reallocation would affect the Marina facilities, both on land and on water. The Marina facilities will become unusable at their present location due to inundation and more significant water level fluctuations. Marina facilities will also lose the protection they currently

have from wave and ice actions, because the existing breakwater and surrounding land masses will be inundated. Daily, weekly and monthly park and marina operations will need to be significantly modified to account for more frequent and larger water level fluctuations. The Marina should be fully mitigated so that it is able to provide a functionally equivalent recreational experience at the new reallocated lake level and the ROD should include costs for Park's increased daily operations to help keep the Marina operable despite reservoir fluctuations.

6. **We would like to see further impact assessment caused by the loss of land currently used by terrestrial wildlife habitat, including a reduction in watchable wildlife opportunities.**

Wildlife habitat will be negatively impacted by the inundation of the area upstream of Chatfield Reservoir on Deer Creek, Plum Creek and the South Platte River. In addition, this loss of habitat will have a significant negative impact on the recreational watchable wildlife user at Chatfield State Park. The DEIS states this habitat type is not common in the Denver Metro area, which will make the replacement of this type of habitat difficult, but it does not provide analysis for loss or replacement of this recreational experience. Areas that are designated to replace this habitat that are off site will need to provide for access and similar watchable wildlife opportunities.

Riparian type habitats (areas associated with the stream) are known to harbor the highest diversity of wildlife species of any habitat type. The loss of a multi-aged cottonwood galleries, including mature large trees, will negatively impact a large number of bird species especially cavity nester and migratory birds. When these multi-aged cottonwood areas are replaced or redeveloped it should be with similar diversity of both the trees and the understory. The need to redevelop this type of habitat on Chatfield State Park would provide immediate habitat for displaced bird and other wildlife and potentially lessen the loss of recreation in the area. Replacement habitat that is located off site will need to provide similar age structure of tree and associated habitat diversity.

There are conflicting estimates of the number of acres of cottonwood bird habitat that would be impacted. The number of impacted acres needs to be clarified. While the CMP indicates 42.5 acres of mature cottonwood bird habitat are impacted, the proposed "Tree Clearing Plan" in a report by Tetra Tech shows 243.5 acres of trees being removed below elevation of 5439 feet. No estimate of additional woodland area that might be impacted between 5439 and 5444 feet has been provided. Adequate mitigation/compensation must be provided to minimize impacts on recreational and wildlife opportunities of the cottonwood within Chatfield State Park.

To mitigate the effects of the mudflats, an agreed upon noxious weed program should also be required as a condition of the Corps' approval of the Reallocation and remain in place for the life of the project; however, the noxious weed program should not include the use of domestic sheep or goats, due to the potential disease transmission to the wild bighorn sheep herd found in Waterton Canyon.

We believe that current data should be collected and used use in the analysis of potential impacts on the Preble's Meadow Jumping Mouse. Mitigation measures could include preservation and enhancement of riparian and adjoining upland habitats in nearby off site areas. Parks and Wildlife along with the U.S. Fish and Wildlife Service should be included in identifying of potential habitat before project approval. If these potential sites are located on private property, then the specific property owners should be identified as willing participants. As a condition of the Corps' approval of the Reallocation, all habitats should be assessed and all conservation or other agreements should be finalized for the acquisition of such habitat prior to storing any water

in the Reallocated Space. It also appears that areas that have been identified for enhancement (ex. Sugar Creek) are existing critical habitat. It seems that lost habitat is being replaced with existing critical habitat. If Chatfield State Park loses habitat, such habitat should be replaced with newly created or suitable unoccupied habitat that is not within the already designated critical habitat. If existing critical habitat is enhanced an agreed upon ratio of enhanced acres versus lost acres will need be developed.

CPW understands the importance of the Reallocation Project to the Water Providers and citizens on the Front Range. Additionally Chatfield State Park is clearly an environmental and recreational asset to those same citizens and offers tremendous economic benefits to the State of Colorado. We believe the Project can be a model of cooperation addressing multiple interests and we look forward to working closely with the Providers and the Corps of Engineers to achieve that success.

Parks and Wildlife greatly appreciates this opportunity to comment on the DEIS. Thank you in advance for your time and consideration of these issues. Please contact me if you require any additional information or clarification of the points made in this letter.

Sincerely,

Mike King

Executive Director, Colorado Department of Natural Resources

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

August 16, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned COTTONWOOD WATER AND SANITATION DISTRICT are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to

that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Scott Lamond
COTTONWOOD WATER AND SANITATION DISTRICT
President of the Board of Directors

Denver Board of Water Commissioners

H. Gregory Austin, President
John R. Lucero, 1st Vice President
Penfield W. Tate
Thomas A. Gougeon
Paula Herzmark

James S. Lochhead, CEO/ Manager

1600 W 12th Avenue
Denver, CO 80204-3412
Phone: 303-628-6500
Fax: 303-628-6509
jim.lochhead@denverwater.org
www.denverwater.org

July 16, 2012

U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

I am writing to offer Denver Water's support for the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement recently released for public comment. This project presents a unique opportunity to increase water supply for Front Range and northeastern Colorado water providers and provide water flow for recreational use and environmental enhancement in the Denver metropolitan reach of the South Platte River.

Storing more water in Chatfield Reservoir will make better use of an existing water storage facility by allowing the capture of up to an additional 20,600 acre-feet from the South Platte River in wet years. With anticipated water supply shortfalls over the next 40 years projected to range from 99,000 acre-feet to 360,000 acre-feet per year, it is important to find creative solutions to increase supplies that also provide environmental benefits and complement water reuse projects and water conservation efforts. We believe additional storage space in Chatfield Reservoir presents such a solution.

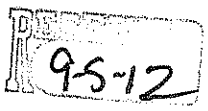
Denver Water is excited about the possibility for using water from the reallocated storage to enhance stream flows in the metropolitan reach of the South Platte River. Denver Water has supported and contributed to efforts to enhance this reach of the South Platte for many years. We were involved in the initial discussions on the concepts of strategic releases from the Chatfield Reservoir reallocated storage and in the mid-1990's we were directly involved in the South Platte River Corridor Project sponsored by the Corps, City of Denver, Colorado Division of Wildlife, Environmental Protection Agency, and others. Cooperative and strategic operations of the reallocated storage space provide a unique and creative opportunity to benefit the environment of the metro reach of the South Platte and, at the same time, increase water supplies.

Denver Water supports the Tentatively Recommended Plan in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and requests that this letter be made part of the record of public comments on the draft FR/EIS.

Sincerely,

James S. Lochhead
CEO/Manager

DENVER METRO CHAMBER OF COMMERCE



August 30, 2012

U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

RE: Denver Metro Chamber of Commerce Support for Chatfield Reservoir Storage Reallocation Project

Dear Ms. Jarrett:

The Denver Metro Chamber of Commerce (Denver Metro Chamber), which represents 3000 members and their 300,000 employees, supports the proposed Chatfield Reservoir Storage Reallocation Project described in the recently released Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS). This project offers a much needed water supply opportunity for the water providers serving the Denver metro area, which is imperative to the continued economic health and growth of the region.

Over the next 40 years, there is an anticipated water supply shortage of approximately 99,000 to 360,000 acre feet per year in the South Platte River Basin. Every opportunity to make better use of the water possessed by this region must be pursued.

In a drought year like the one Colorado is currently experiencing, the added water storage in Chatfield, along with conservation and reuse efforts, could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes. Having enough water for these purposes could make the difference in the growth and vitality of economy of the Denver metro region.

Reallocation of storage space is already among the authorized purposes of the Chatfield Reservoir, which also include flood control, recreation, and fish and wildlife and water supply.

Furthermore, the U.S. Army Corps of Engineers has determined that the reservoir can safely store an additional 20,600 acre feet of water without jeopardizing the reservoir's flood control purposes.

The Chatfield study enjoys wide support, including that of the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

For the foregoing reasons, the Denver Metro Chamber urges the U.S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir at the soonest possible time.

Sincerely,

Kelly J. Brough

Kelly J. Brough, president and CEO
Denver Metro Chamber of Commerce

DENVER WATER
1600 West 12th Avenue • Denver, Colorado 80204-3412
Phone 303-628-6000 • Fax No. 303-628-6199 • denverwater.org

September 4, 2012

U.S. Army Corps of Engineers
Omaha District CENWO-PM-AA
Attention: Ms. Gwyn Jarrett, Chatfield Reservoir Storage Reallocation FR/EIS
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

Congratulations on the issuance of the draft Chatfield Reservoir Storage Reallocation Feasibility Report (FR) and Environmental Impact Statement (EIS). As you know, Denver Water supports the tentatively recommended plan in the draft FR/EIS as stated in the letter from Denver Water's CEO/Manager, James Lochhead, dated July 16, 2012.

Chatfield Reservoir is an important element of Denver Water's raw water collection system. I would like to request the following edits to the draft FR/EIS to make sure it accurately characterizes Denver Water's use of Chatfield Reservoir as determined in Water Court decrees; the April 3, 1979 agreement between Denver Water and the State of Colorado; the March 1, 1979 agreement between the United States and the State of Colorado; long-standing operational practices; and the status of current plans for use of Chatfield.

1. In numerous places in the document, the volume of 10,785 acre-feet is referred to as the volume between elevations 5,423 and 5,432 feet msl. This is the volume between these elevations as specified in the April 3, 1979 agreement between Denver Water and the State of Colorado. The volume between these two elevations as determined by the most recent survey (1998) by the U.S. Army Corps of Engineers is 11,134 acre-feet. This volume could again change in the future if another survey is undertaken. Denver Water will still, as it has historically, be bound by the two agreements specified above with regard to its operations between elevations 5,423 and 5,432 feet msl. Furthermore, the document refers to "water storage rights of 10,785 acre-feet" (p. 1-9). This is erroneous as the volume of Denver Water's storage rights in Chatfield Reservoir is 55,000 acre-feet (Decree in Case No. W-8783-77). Denver Water requests that any reference to the outdated value of 10,785 acre-feet as the volume between these two elevations be replaced with reference to the "storage volume between elevations 5,423 and 5,432 feet msl."

2. In numerous places in the document, the elevation of 5,426.94 feet msl is associated with a storage volume of 20,000 acre-feet. The storage volume of 20,000 acre-feet is the May 1-August 31 minimum storage level goal as specified in the April 3, 1979 agreement between Denver Water and the State of Colorado. The operative goal as emphasized in this agreement and as honored by Denver Water is the storage of 20,000 acre-feet. The most recent survey (1998) by the U.S. Army Corps of Engineers indicates that the elevation at this storage level is 5,426.32 feet msl. The elevation associated with 20,000 acre-feet could again change in the future if another survey is undertaken, but Denver Water will still, as it has historically, be bound

by the April 3, 1979 agreement with regard to the goal of 20,000 acre-feet during the May 1-August 31 period. Denver Water requests that references to the elevation 5426.94 feet msl be replaced with a reference to the "minimum storage level goal of 20,000 acre-feet."

3. On page 4-144 in section 4.19.1.1 the document discusses the "Chatfield Reservoir Drought Drawdown" a proposal by Denver Water to pump water from the pool in Chatfield below elevation 5,423 feet, msl. The document specifies that this project would draw down the reservoir at specific rates, for example "100 acre-feet per day" and "20 acre-feet per day via the Chatfield ditches." I would like to request that the sentence beginning with "The pump station would cause..." be removed. The scope of this project is too ill-defined and no approvals have been obtained, so operational details may not be at all representative of how this project would be operated, if it is constructed.

4. In the first full paragraph on page 2-8 of the draft FR/EIS, please change the second sentence to read: "In 1977, Denver Water filed for a conditional water right that included reallocated storage space..."

I appreciate the opportunity to comment on the draft FR/EIS and would like to request that this letter be made part of the record of public comments.

Sincerely,

Bob Peters, PE
Water Resource Engineer

DOUGLAS COUNTY
COLORADO

Office of the County Commissioners

www.douglas.co.us

June 27, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Douglas County Board of County Commissioners supports the proposed Chatfield Reservoir Storage Reallocation Project described in the recently released Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS). We believe this is a much needed water supply opportunity for the water providers serving Douglas County residents.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts. The participating water providers have also agreed to undertake and pay for the mitigation and modification of recreation facilities as deemed necessary.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without the need for pumping. Allocating additional storage space to entities currently holding water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely,

BOARD OF DOUGLAS COUNTY COMMISSIONERS

Jack A. Hilbert, Chair

cc: County Commissioners

DOUGLAS COUNTY
SHERIFF'S OFFICE

David A. Weaver, Sheriff

August 9, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

Dear Ms. Jarrett:

As Sheriff of Douglas County, I am writing this letter in support of the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report/Environmental Impact Statement for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. I believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

As a matter of public safety the reliance on reliable water supplies for fire suppression for residential and wildland fire fighting is of great concern. This project could have a very beneficial impact that will be long lasting and could help save lives and property.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

There are numerous developments that are either planned in Douglas County and/or are in the planning stages and this is critical for the long-term growth and safety of all the citizens in Douglas County and the front range.

Yours truly,

David A. Weaver, Sheriff

Robert A. Christensen Justice Center
4000 Justice Way
Castle Rock, CO 80109

303.660.7505
www.dcsheriff.net
dcso@dcsheriff.net

ECCV
Water & Sanitation District

6201 S. Gun Club Road
Aurora, CO 80016
Phone: 303-693-3800
Fax: 303-699-6058
www.eccv.org

August 23, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The East Cherry Creek Valley Water & Sanitation District (ECCV) supports the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment.

ECCV provides water and sewer service to over 55,000 people in Arapahoe County and the City of Centennial. ECCV has participated in regional water supply cooperation for over 30 years, and is a member of the South Metro Water Supply Authority (SMWSA). SMWSA members serve the vast majority of homes and businesses in the South Metro region, and have a long-term obligation to provide a permanent, reliable water supply to our customers. The Chatfield Storage Reallocation Project is a much needed water supply opportunity for both the Front Range and northeastern Colorado water providers.

The SMWSA is comprised of fifteen municipal and special water districts within Arapahoe and Douglas Counties in Denver's South metropolitan area. It is critical for these entities to reduce their dependency on non-renewable groundwater and expand renewable water resources. The 1,400 AF of storage (6.761% of the total 20,600 AF) that the SMWSA is seeking from the Chatfield Reallocation Project would allow these entities to store water which would otherwise be lost downstream and utilize these supplies during years of drought.

The project participants have committed to address the impacts of the reallocated storage use, and are confident the EIS process has considered all meaningful impacts and appropriate mitigation measures. Those that benefit from the project are prepared to fund this project, as it will increase the reliability of water supplies to municipal customers as well as additional agriculture

50 YEARS OF SERVING THE COMMUNITY

beneficiaries downstream. Offsetting the shortage of water during droughts is critical to Colorado agriculture.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

ECCV strongly urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

O. Karl Kasch, Chairman
Board of Directors

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RESOLUTION No. 2012-005
EAST CHERRY CREEK VALLEY WATER & SANITATION DISTRICT
SUPPORT FOR THE CHATFIELD RESERVOIR
STORAGE REALLOCATION PROJECT

WHEREAS the East Cherry Creek Valley Water & Sanitation District (ECCV) is a Title 32 Special District under Colorado Statutes, formed in 1962, and

WHEREAS ECCV provides water to over 55,000 people in Arapahoe County and the City of Centennial, and

WHEREAS ECCV is involved in the regional cooperation efforts to supply water to the southern Denver Metropolitan area and is a member of the South Metro Water Supply Authority (SMWSA), and

WHEREAS the SMWSA has identified the Chatfield Reallocation Project as a very valuable and needed project for increasing renewable water supplies for its membership under the South Metro Master Plan (2007) and Mid-Term Water Delivery Project Plan (2008), and

WHEREAS, as discussed in the CWCB's SWSI study identifies that there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the SMWSA is an upstream water provider in the Chatfield Reallocation seeking 1,400 AF (or 6.761%) of permanent storage space in Chatfield Reservoir, and

WHEREAS the SMWSA membership desire to utilize their allocation of Chatfield Reservoir to increase existing water supplies and decrease reliance on the non-renewable Denver Basin aquifers, and

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held while preserving the reservoir's flood control purposes, and

WHEREAS this project represents a rare opportunity to capture runoff in an on-stream reservoir while utilizing an existing dam, and

WHEREAS extensive investigations of both recreational and environmental impacts have been conducted, and appropriate mitigation measures have been described to amply mitigate such impacts, and,

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to pay for mitigation of environmental impacts and modification of recreation and to reimburse the Federal Government for $14 million and

NOW THEREFORE BE IT RESOLVED that ECCV supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project

BE IT FURTHER RESOLVED that ECCV urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that water can be stored in Chatfield Reservoir and used beneficially as soon as possible.

O. Karl Kasch, Chairman
Board of Directors
East Cherry Creek Valley Water & Sanitation District

Gunnison Basin Roundtable
501 Palmer Street
Delta, CO 81416

August 14, 2012

Department of the Army
Corps of Engineers, Omaha District
CENWO-PM-AA
Attn: *Chatfield Reservoir Storage Reallocation FR/EIS*
1616 Capitol Ave.
Omaha, NE 68102-4901

Re: Chatfield Reservoir Storage Reallocation Project

Dear Sir,

On behalf of the members of the Gunnison Basin Roundtable, I am writing to express the roundtable's support for the proposed Chatfield Reservoir Storage Reallocation Project as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Project recently released for public comment.

The Gunnison Basin Roundtable is one of the nine permanent basin roundtables created by Colorado HB 1177, better known as the *Colorado Water for the 21st Century Act.* These roundtables were created to facilitate continued discussions within and between basins on water management issues, and to encourage locally driven collaborative solutions to water supply challenges.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and request that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

Furthermore, we respectfully encourage the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely,

Michelle Pierce
Chairman

August 28, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, Nebraska 68102-4901

Dear Ms. Jarrett:

Jefferson County recognizes the importance of increasing the availability of water to meet the Denver Metropolitan area's growing demand for water. There is an anticipated water supply shortage of approximately 99,000 to 360,000 acre feet per year in the South Platte River Basin over the next 40 years. The possibility of capturing the additional 8,500 average annual yield from the 15 water providers that initiated the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study is strongly supported by the Jefferson County Board of County Commissioners.

With more than 1.6 million visitor days annually, Chatfield State Park is an important environmental, recreational and economic asset to Jefferson County. The proposed mitigation should protect and enhance the State Park's natural and recreational resources as part of the EIS approval.

We encourage the U. S. Army Corps of Engineers to determine that the $184 million project to add 20,600 acre feet of additional storage space in Chatfield is economical and feasible. We also encourage the Colorado Water Conservation Board to continue its efforts to prevent the loss of water to out-of-state flows and increase its conservation and reuse efforts to fulfill the remaining water supply shortfall.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

Donald Rosier
Chairman

John Odom

Faye Griffin

100 Jefferson County Parkway, Golden, Colorado 80419
(303) 279-6511
http://jeffco.us

MOUNT CARBON METROPOLITAN DISTRICT
8390 East Crescent Parkway, Suite 600
Greenwood Village, CO 80111

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Mount Carbon Metropolitan District (the "District') is a quasi-municipal corporation and political subdivision of the State of Colorado with the power to provide facilities, services and programs to supply water. On behalf of the District, I am writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers, including the District.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007-FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts. In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

MOUNT CARBON METROPOLITAN DISTRICT

Thomas M. Clark
President

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STATE OF NEBRASKA

Dave Heineman
Governor

DEPARTMENT OF NATURAL RESOURCES
Brian P. Dunnigan, P.E.
Director

August 3, 2012

IN REPLY TO:

Gwyn M Jarrett
Project Manager Chatfield Reallocation
U.S. Army Corps of Engineers
1816 Capitol Avenue
Omaha, Nebraska 68102

RE: Chatfield Reservoir Storage Reallocation Draft Feasibility Study Report

Dear Ms. Jarrett:

In response to the Corps' June 8, 2012, release of the draft feasibility study report and environmental impact statement for Chatfield Reservoir storage reallocation, I am providing our comments for your consideration when you prepare the final study report and EIS.

As documented in the draft report, the tentatively Recommended Plan would reallocate 20,600 acre-feet of Chatfield's flood control storage to water supply storage. The additional storage would be used for M&I water supply, agriculture, recreation, and fishery habitat protection and enhancement purposes. The Department is pleased to see the flexibility in the use of water allocated under a federal project. Reallocation of storage water is a vital tool to have available to water managers who are facing increasing water demands and cycles of drought. I hope that other federal projects will look to this project as an example of how parties can work cooperatively to find solutions to the future demands for water.

While the Department applauds the efforts to find tools to assist water management, as the lead representative for the state of Nebraska on the Governance Committee for the Platte River Recovery and Implementation Program (PRRIP), the Department is concerned that the proposed project in Colorado may have an impact on the flows at the Nebraska state line. Further reductions to these flows would have the potential to create a greater burden for Nebraska in implementing its PRRIP New Depletion Plan. To ensure that the regime of the river is preserved and Nebraska is not burdened with additional ESA compliance obligations now or in the future, Nebraska wants to be assured that any depletions of streamflow at the state line resulting from this project will be balanced with the necessary accretions, such that flows that would have been available under July 1, 1997 levels of development are maintained. Similarly, this analysis should also determine any potential for increased flood stages at the Nebraska state line due to the decrease in available flood pool storage at Chatfield Reservoir.

I appreciate this opportunity for providing comments and look forward to receiving the final report. If you have any questions regarding the comments, please do not hesitate to contact me.

Sincerely,

Brian P. Dunnigan, P.E.
Director

301 Centennial Mall South, 4th Floor • P.O. Box 94676 • Lincoln, Nebraska 68509-4676 • Phone (402) 471-2363 • Telefax (402) 471-2900

NORTH PLATTE BASIN ROUNDTABLE

Wm. Kent Crowder, Chair
P.O. Box 1019
Walden, Colorado 80480

FAX (970) 723-4706
(970) 723-4660

August 8, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901

chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We are writing to support the proposed Chatfield Reservoir Storage Reallocation Project (Project) in Colorado as described in the Chatfield Reservoir Storage Reallocation Study (Study), which includes the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Project recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the Study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water and facilities we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Kent Crowder, Chair
North Platte Basin Roundtable

PINERY
WATER & WASTEWATER DISTRICT

P.O. BOX 1660 ▮ PARKER, CO 80134 ▮ 303/841-2797 ▮ FAX 303/841-2123

July 30, 2012

Kayla Eckert Uptmor
Chief of Planning
U.S. Army Corps of Engineers Omaha District
Edward Zorinsky Federal Building
1616 Capitol Avenue
CENWO-PM-A, Suite 739
Omaha, NE 68102-4901

Dear Ms. Eckert Uptmor:

SUBJECT: SUPPORT FOR CHATFIELD RESERVOIR REALLOCATION PROJECT

The Board of Directors of the Pinery Water and Wastewater District discussed the Chatfield Reservoir Reallocation Project at our Board meeting on July 11, 2012. The Board of Directors voted unanimously to support the project and directed that I send you this letter to express that support.

Chatfield Reservoir is in an ideal location to capture additional runoff flowing down the South Platte River and Plum Creek. This will allow the water providers in the South Metro area to reduce their reliance on non-renewable groundwater and instead begin to add renewable surface water to their supplies.

With the anticipated water supply shortage in the future and the declining productivity of the Denver Basin aquifers this project is of vital importance to assure adequate water supplies for our residents in the future. We encourage approval of the Chatfield Reservoir Reallocation Project at the earliest possible date.

Sincerely,

PINERY WATER & WASTEWATER DISTRICT

Charles J. Krogh
District Manager

07/27/12 2:03 PM P:\LAN FILES\CHATFIELD LETTER.DOCX

water & sanitation district
Platte Canyon

September 4, 2012

Ms. Gwyn Jarrett
U.S. Army Corps of Engineers
Edward Sorinsky Federal Building
CENWO-PM-AA
1616 Capital Ave.
Omaha, NE 68102-4901

Re: Chatfield Reservoir Storage Reallocation Project

Dear Ms. Jarrett;

This is to convey Platte Canyon Water and Sanitation District's unequivocal support for the Chatfield Reservoir Storage Reallocation Project. Platte Canyon currently serves approximately 6,000 residential, commercial and industrial customers in Jefferson and Arapahoe Counties. While currently receiving potable water from Denver Water under a Read and Bill Distributor Contract, the District understands the critical need for expanding water supplies in the Front Range. Failure to acquire additional water storage will severely impact the viability of agricultural businesses on both sides of the Continental Divide as municipal water suppliers seek to convert agricultural water rights for municipal use. The Chatfield Storage Project will not only help to preserve this important segment of Colorado's economy, but will solidly future water supplies for a number of municipal suppliers as well.

The Colorado Water Supply Investigation of 2010 revealed a water supply shortage in the South Platte River Basin of 90,000 to 360,000 acre feet per year. The proposed Chatfield project leverages the use of an existing facility to satisfy a portion of the need for future water supplies. Along with conservation and water reuse efforts being successfully pursued throughout the Front Range, additional storage of existing water rights is a critical component of resolving the water supply gap in the Denver Metropolitan Area.

Platte Canyon Water and Sanitation District is honored to join with Colorado's Congressional delegation, the Colorado General Assembly, the Colorado Water Conservation Board, the Metro Water Roundtable, the Colorado River District and numerous other agencies and individuals in supporting the Chatfield Reservoir Storage Reallocation Project and we urge the U.S. Army Corps of Engineers to proceed with issuance of a Record of Decision and all necessary permits without further delay.

Sincerely,

Patrick Fitzgerald

Patrick Fitzgerald
District Manager

PJF/blb

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8739 W. Coal Mine Ave. Littleton, Colorado 80123 (303) 979-2333 Fax (303) 933-1769
www.plattecanyon.org

PLUM CREEK
WASTEWATER
AUTHORITY

July 17, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned, Board of the Plum Creek Wastewater Authority, are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado. This Project is described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife habitat, and domestic water supply.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water user groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

4255 N US HIGHWAY 85 CASTLE ROCK, CO 80108
PHONE: 303.688.1991 FAX: 303.688.1992

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to be made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Plum Creek Wastewater Board of Directors

Jerry Spradling, President

Jim Worley, Vice President

Ron Redd, Secretary

ROXBOROUGH WATER AND SANITATION DISTRICT

RECEIVED 7-26-12

July 23, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

RE: Chatfield Reservoir Storage Reallocation Project

Dear Ms. Jarrett:

I am Larry D. Moore, General Manager for the Roxborough Water and Sanitation District and I am writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) which was recently released for public comment. I believe this is a much needed water supply opportunity for the Front Range Colorado water providers and northeastern agriculture interest. Unfortunately, I was out of town the week the public meetings were held. Had I been here I would have made public comments in support of the project on behalf of the Roxborough Water and Sanitation District.

Storing more water in Chatfield Reservoir will make better use of an existing facility that currently provides flood control, recreation, fish and wildlife and water supply as well as capturing additional runoff flowing down the main stem of the South Platte River and Plum Creek without pumping. Allocating the added storage space to municipal water providers, agricultural interest and for environmental concerns will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows. Additional storage is very important for less senior water rights.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

I support and urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Sincerely,

Larry D Moore

Larry D Moore
General Manager
Roxborough Water & Sanitation District

6222 N. Roxborough Park Rd. —— Littleton, CO 80125 —— FAX (303) 933-3649 —— Phone (303) 979-7286
www.roxwater.com

RESOLUTION NO. 12-08-06

RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS, the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes; and

WHEREAS, the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986; and

WHEREAS, the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties; and

WHEREAS, the Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation); and

WHEREAS, storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping; and

WHEREAS, allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of state-flows; and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes; and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years; and

WHEREAS, the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed; and

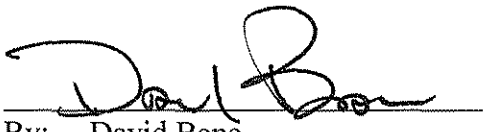
WHEREAS, the Roxborough Water and Sanitation District Board of Directors has reviewed and considered the arguments in support of and against expanding the storage capacity in the Chatfield Reservoir and has determined it to be in the best interest of the District, the District's residents and taxpayers, and the water systems and providers utilizing storage capacity in the Chatfield Reservoir to support the expansion effort.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Roxborough Water and Sanitation District supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Board of Directors of the Roxborough Water and Sanitation District urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

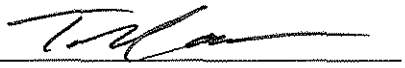
APPROVED AND ADOPTED THIS 1st DAY OF AUGUST, 2012.

ROXBOROUGH WATER & SANITATION DISTRICT



By: David Bane
Its: President

ATTEST:



By: Tim Moore
Its: Secretary

SOUTH PLATTE II WORKING GROUP

received 20aug2012

August 10, 2012

Department of the Army
Corps of Engineers, Omaha District CENWO-PM-AA
ATTN: Chatfield Reservoir Storage Reallocation FR/EIS
1616 Capitol Avenue
Omaha, NE 68102-4901

To Whom It May Concern:

We are writing as the municipal and county members of the South Platte Working Group: a collaborative, multijurisdictional working group convened to maximize recreational opportunities along and adjacent to the South Platte River in Arapahoe County. In this working group we are partnering with the Colorado Water Conservation Board and Urban Drainage and Flood Control District to restore riparian habitat and make the river a more vital part of our communities.

We are supportive of the goal of the Chatfield Reallocation Project, which is to provide additional water storage for the project proponents. We also agree that expanding Chatfield Reservoir seems like an important, cost-effective and less environmentally impactful solution to water storage needs than building new reservoirs to store the same amount of water.

Our chief concern with the Draft Environmental Impact Statement (DEIS) is that information on the likely flows from Chatfield Dam downstream through the cities of Metro Denver is not included in the body of the report (although it is included in Appendix H) and seems to be underemphasized as an integral part of the study's analysis. Additionally, "adaptive management" is cited almost 200 times in the DEIS but it is not clear how an adaptive management process might be used to address potential impacts related to downstream flows. Our expectation is that an adaptive management process would include the affected communities downstream in Arapahoe County with necessary financial support to conduct an effective, thorough and fair process.

Our working group is focusing on maximizing the potential of the South Platte River to preserve habitat and provide recreational opportunities for the citizens of Arapahoe County and other Metro Denver residents. Additionally, the cities along the river are already struggling to meet water quality requirements under tight budgetary constraints. A further reduction in flows in the South Platte would seriously and negatively impact our ability to improve and share this important amenity as well as the cities' ability to provide safe drinking water to their residents. More information on expected flows from the expanded reservoir would help us plan for our priorities and outline an action plan for addressing the negative impacts of decreased flows should they occur.

Because of the importance of the South Platte to our communities, we strongly urge the Corps to:

- Revisit the flow information in the DEIS;
- Provide and document additional information about anticipated flows and any expected changes to the current annual hydrograph in the South Platte going through Arapahoe County;

- Provide for more effective measurement of flows through Arapahoe County rather than depending on Denver and Chatfield gages;
- Provide such flow information in the body of the Final EIS rather than in an appendix to ensure that the importance of and potential impacts to flows are clear to all who read the final EIS; and
- Explicitly discuss how adaptive management will be applied to understanding the impacts of and adjusting any changes to flow levels from Chatfield Reservoir.

Additionally, we would be very interested in engaging in dialogue with the participants (upstream and downstream users) and sponsors of the study to determine the possibility of maximizing the benefits of releases from the reservoir to maintain flows that are good for recreation, habitat and water quality. We anticipate initiating such dialogue later this year, and we strongly hope that the Corps will support and participate in the process and encourage the project proponents to do so as well. We encourage the Corps to consider these discussions as an essential part of any adaptive management and/or mitigation process.

We welcome the opportunity to discuss these issues directly with the leads of the study. For more information, please contact Heather Bergman, Peak Facilitation (Email: heather@peakfacilitation.org).

Sincerely,

Susan Beckman, Commissioner
Arapahoe County

Shannon Carter, Director
Open Spaces and Intergovernmental Relations
Arapahoe County

Randy Penn, Mayor
City of Englewood

Gary Sears, City Manager
City of Englewood

Debbie Brinkman, Mayor
City of Littleton

Michael Penny, City Manager
City of Littleton

Cliff Mueller, Council Member
City of Sheridan

Devin Granbery, City Manager
City of Sheridan

Sue Rosser, Board Member
South Suburban Parks & Recreation District

Dave Lorenz, Executive Director
South Suburban Parks & Recreation District

Gale Christy, Mayor
Town of Columbine Valley

Southwest Metropolitan
Water and Sanitation District
www.swmetrowater.org
8739 W. Coal Mine Ave. • Littleton, Colorado 80123 • (303) 979-2333 • Fax (303) 933-1769

September 4, 2012

Ms. Gwyn Jarrett
U.S. Army Corps of Engineers
Edward Sorinsky Federal Building
CENWO-PM-AA
1616 Capital Ave.
Omaha, NE 68102-4901

Re: Chatfield Reservoir Storage Reallocation Project

Dear Ms. Jarrett;

This is to convey Southwest Metropolitan Water and Sanitation District's unequivocal support for the Chatfield Reservoir Storage Reallocation Project. Southwest Metropolitan currently serves approximately 13,000 residential, commercial and industrial customers in Jefferson and Arapahoe Counties. While currently receiving potable water from Denver Water under a Read and Bill Distributor Contract, the District understands the critical need for expanding water supplies in the Front Range. Failure to acquire additional water storage will severely impact the viability of agricultural businesses on both sides of the Continental Divide as municipal water suppliers seek to convert agricultural water rights for municipal use. The Chatfield Storage Project will not only help to preserve this important segment of Colorado's economy, but will solidly future water supplies for a number of municipal suppliers as well.

The Colorado Water Supply Investigation of 2010 revealed a water supply shortage in the South Platte River Basin of 90,000 to 360,000 acre feet per year. The proposed Chatfield project leverages the use of an existing facility to satisfy a portion of the need for future water supplies. Along with conservation and water reuse efforts being successfully pursued throughout the Front Range, additional storage of existing water rights is a critical component of resolving the water supply gap in the Denver Metropolitan Area.

Southwest Metropolitan Water and Sanitation District is honored to join with Colorado's Congressional delegation, the Colorado General Assembly, the Colorado Water Conservation Board, the Metro Water Roundtable, the Colorado River District and numerous other agencies and individuals in supporting the Chatfield Reservoir Storage Reallocation Project and we urge the U.S. Army Corps of Engineers to proceed with issuance of a Record of Decision and all necessary permits without further delay.

Sincerely,

Patrick Fitzgerald

Patrick Fitzgerald
District Manager

PJF/blb

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LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

June 25, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

I, the undersigned Executive Director of the Special District Association of Colorado on behalf of the Board of Directors of the Special District Association of Colorado, am writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to

that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Ann A. Terry
Executive Director, Special District Association of Colorado
On behalf of
Board of Directors, Special District Association of Colorado

Town of Kersey
Est.1908

332 3rd Street P.O. Box 657 Kersey, CO 80644
Office-970-353-1681 Fax-970-353-2197

July 6, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned board of trustees of the Town of Kersey are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Bob Kellerhuis
Mayor

TOWN OF LASALLE, COLORADO

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

DATE: August 14, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned of the Town of LaSalle, Colorado are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Board of Trustees of the Town of LaSalle.

By: _____
Andrew Martinez - Mayor

TOWN OF LASALLE, COLORADO

RESOLUTION U - 2012

RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS, the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS, the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS, the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS, the Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS, storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping, and

WHEREAS, allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of state-flows, and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes, and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS, the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF LASALLE, COLORADO:

1. That the Town of LaSalle supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

2. Town of LaSalle urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

PASSED AND ADOPTED, SIGNED AND APPROVED this 14th day of August, 2012

TOWN OF LASALLE, COLORADO

By: _____
Andrew Martinez – Mayor

ATTEST:

_____
Toni Polland – Deputy Town Clerk

TOWN OF Severance

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

August 20, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

We the undersigned Town of Severance Mayor and Town Board of Trustees are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General

231 West 4th Avenue • P.O. Box 339 • Severance, Colorado 80546 • ph 970.686.1218 • fax 970.686.6250

Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

Donald R. Brookshire

Mayor Donald R. Brookshire

Town of Severance
Town Board of Trustees

TOWN OF SEVERANCE COLORADO SEAL

Patricia J. Lesh

Patricia J. Lesh
Town Clerk/Treasurer

TOWN OF SEVERANCE

RESOLUTION 2012-09R

A RESOLUTION OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

WHEREAS the U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes, and

WHEREAS the Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply, and the reallocation of storage space has been authorized since 1986, and

WHEREAS the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties, and

WHEREAS the Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation), and

WHEREAS storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping, and

WHEREAS allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of state-flows, and

WHEREAS, in a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes, and

WHEREAS, as discussed in the CWCB's SWSI study, there is an anticipated water supply shortage or gap of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years, and

WHEREAS the water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed,

NOW THEREFORE BE IT RESOLVED that the Town of Severance supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Town of Severance urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Adopted this 20th day of August, 2012

TOWN OF SEVERANCE

By: _____
Donald R. Brookshire, Mayor

TOWN OF SEVERANCE COLORADO
SEAL

Attest:

_____
Patricia J. Lesh, Town Clerk

WIGGINS
Gateway to the Plains & the Rockies

304 Central Avenue, Wiggins, Colorado 80654 Telephone: 970-483-6161 Fax: 970-483-7364

July 12, 2012

U.S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Atten: Gwyn Jarrett
1616 Capital Ave.
Omaha, NE 68102-4901

Dear Gwyn:

The Town of Wiggins Board of Trustees are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the draft combined Feasibility Report (FR)/Environmental Impact Statement (EIS) recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and Northeastern Colorado water providers.

Storing more water in Chatfield Reservoir will make better use of existing facility and capture additional runoff flowing down the South Platte River and Plum Creek.

Yours Truly,

Margarita Leon
Mayor

cc: Central Colorado Water Conservancy District

TOWN OF WINDSOR
COLORADO

July 23, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Town of Windsor, Colorado, is writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

A Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project has been prepared by the U. S. Army Corps of Engineers in cooperation with the State of Colorado and in consultation with 15 prospective water users groups and many other interested parties. The water providers who contract and pay for use of the water storage space in Chatfield Reservoir have agreed to undertake and pay for needed mitigation of environmental impacts and to undertake and pay for modification of recreation facilities as needed.

The Chatfield study has been supported by the Colorado Congressional delegation (FY2007–FY2012 appropriations bills and numerous joint letters), the Colorado General Assembly (SJR 07-019) and the Colorado Water Conservation Board (serving as non-federal sponsor for the study, January 2010 resolution, and allocation of $13 million to assist with implementation).

Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to that water will prevent the loss of as much as 20,600 acre feet of South Platte River water in wet years to out-of-state flows.

There is an anticipated water supply shortage of approximately 99,000 to 360,000 AF per year in the South Platte River Basin over the next 40 years. We believe that every opportunity to make better use of the water we have must be pursued, along with conservation and reuse efforts.

In a drought year like this one, the added water storage space in Chatfield (along with aggressive water conservation efforts) could make the difference in having enough water for municipal, industrial, agricultural and environmental purposes.

We support the Tentatively Recommended Plan in the Draft Integrated Feasibility Report/Environmental Impact Statement on the Chatfield Reservoir Reallocation Project and direct that this letter be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this draft FR/EIS.

In addition, we urge the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Yours truly,

John S. Vazquez, Mayor

Upper Gunnison River Water Conservancy District

210 West Spencer Avenue, Suite B • Gunnison, Colorado 81230
Telephone (970) 641-6065 • Facsimile (970) 641-1162 • www.ugrwcd.org

August 28, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Directors of the Upper Gunnison River Water Conservancy District herewith state our support for the proposed **Chatfield Reservoir Storage Reallocation Project** in Colorado as described in the Draft Integrated Feasibility Report (FR) and Environmental Impact Statement (EIS) recently released for public comment.

We have no particular comments or criticisms concerning the technical or economic specifics of the Chatfield Reallocation Project itself, and do not feel it is our place to offer such. Our main point in writing is to commend the creative problem-solving and cooperation this project represents, between the Corps of Engineers and the South Metro Water Supply Authority. We appreciate the towns and cities of the metropolitan Front Range creatively exploring ways to better use the natural resources of the Front Range – Front Range communities using Front Range water to solve Front Range water problems.

This project represents the best of the thinking and planning that went into the Metropolitan Water Supply Initiative of the mid-1990s. It is consistent with what the late Chips Barry, visionary director of Denver Water, described as the "new paradigm" for Colorado water development. Quoting Barry from a presentation on "The Maturing Metropolis" to the Colorado Water Workshop in Gunnison, in 2005: "In the old paradigm, only large projects were deemed worthy of our attention. In the new paradigm, we need to look at all types of system refinements that are small, but when taken together can amount to hundreds or thousands of acre-feet."

The Chatfield Reallocation carries forward in a positive way the vision of Barry and the work of the Metropolitan Water Supply Initiative. We hope the Corps of Engineers will give speedy approval and encouragement to this project, thereby encouraging other Front Range entities to look creatively for ways to improve their own water supply situations with Front Range resources.

Sincerely,

Brett Redden

Brett Redden, President, for the Board of Directors,
Upper Gunnison River Water Conservancy District

LETTER OF SUPPORT
FOR
CHATFIELD RESERVOIR STORAGE REALLOCATION PROJECT

July 27, 2012

U. S. Army Corps of Engineers
Edward Zorinsky Federal Building
CENWO-PM-AA
Attention: Gwyn Jarrett
1616 Capitol Avenue
Omaha, NE 68102-4901
chatfieldstudy@usace.army.mil

Dear Ms. Jarrett:

The Roxborough Park Foundation are writing to support the proposed Chatfield Reservoir Storage Reallocation Project in Colorado as described in the Draft Integrated Feasibility Report (FR)/Environmental Impact Statement (EIS) for the Chatfield Reservoir Storage Reallocation Study recently released for public comment. We believe this is a much needed water supply opportunity for the Front Range and northeastern Colorado water providers.

The U. S. Army Corps of Engineers has determined that Chatfield Reservoir, located in Douglas and Jefferson counties, can safely store an additional 20,600 acre feet of water beyond that currently held without jeopardizing the reservoir's flood control purposes. The Reservoir's current authorized purposes include flood control, recreation, fish and wildlife and water supply and the reallocation of storage space.

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Storing more water in Chatfield Reservoir will make better use of an existing facility and capture additional runoff flowing down the South Platte River and Plum Creek without pumping. Allocating that added storage space to entities holding current water rights to

NOW THEREFORE BE IT RESOLVED that the Roxborough Park Foundation supports the U.S. Army Corps of Engineers Tentatively Recommended Plan in the Draft Integrated FR/EIS on the Chatfield Reservoir Storage Reallocation Project and directs that this resolution be delivered to the U. S. Army Corps of Engineers to made part of the record of public comments on this Draft Integrated FR/EIS.

BE IT FURTHER RESOLVED that the Roxborough Park Foundation urges the U. S. Army Corps of Engineers to complete its final review of the project and issue a Record of Decision in a timely manner so that additional water can be stored in Chatfield Reservoir as soon as possible.

Jeanne Hayes
President