

**Chatfield Reallocation FR/EIS Study Meeting
Tetra Tech Conference Room, Lakewood, Colorado
Thursday, July 9, 2009: 9:00 am–11:30 am**

1) Introductions:

- Meeting attendees introduced themselves to the group. Tom Browning (Colorado Water Conservation Board [CWCB]) welcomed the group and introduced the agenda. Topics included General Announcements; Study Updates (Budget, Policy Guidance Memorandum [PGM] Review, and Other Items); EIS Discussion Items (Environmental Mitigation Plan, Recreation Modification Analyses, and Unit Daily Value [UDV] Analysis and BBC study); Public Involvement; and Wrap-Up.

2) General—T. Browning (CWCB):

- Tom first thanked the entire group for their dedication and valuable input to the project. He said he appreciates the opportunity to work with such a unique and committed group and specifically recognized the contributions made by volunteer members.
- Tom reported that the Coordination and Subcommittee meeting held the previous Tuesday went well. The attendees found the information shared during the meeting to be helpful, especially the presentation that summarized the concepts and objectives for environmental mitigation and the proposed approach to develop the Environmental Mitigation Plan. The presentation covered on-site resource mapping for birds, Preble's mouse, and wetlands; development of on-site and off-site EFUs; EFU impacts by resource, drainage, and critical habitat designation; mitigation feasibility; weighting factors; on-site and off-site enhancements; monitoring and adaptive management; and the implementation approach.
- Tom stressed the need to address issues that were detailed in correspondence from EPA concerning need for a 404 Permit, scope of 404(b)(1) analysis, and NEPA requirements so this important project can proceed. The Corps and State want to resolve these issues with EPA in a timely manner and achieve consensus among the parties on any legal, political, and scientific/technological concerns. It was proposed that a small group visit the EPA offices to discuss the issues.

3) Study Updates—Eric Laux (USACE-Omaha):

- **A. Budget.** Eric reported no major setbacks have occurred concerning funding.
 - A Corps dam safety specialist has been retained to perform the stability analysis and determine whether more detailed work in this area is required.
 - Eric expects that funding through Battelle will support external peer review of the Ecosystem models. Due to the localized scope and use of the models, full Corps certification is not required; the approval process is less intensive and independent. The paperwork has been approved to contract a Preble's mouse expert for that part of the review. The Kansas District ATR has been funded to perform the wetlands and riparian portions of the review. Rick McLoud (Centennial) asked about the anticipated review schedule. Eric responded the Preble's mouse review should take about one month, and that he would coordinate that effort with ERO, Tetra Tech, and the Preble's mouse expert. The wetlands and riparian review should be completed in less than a month. Ann Bonnell (Audubon) asked whether U.S. Fish and Wildlife

Service (USFWS) specialists would need to be involved in the model review process. Eric explained that this review addresses only the technical validity of the models, and that implementation of the models is worked through the USFWS in conjunction with representatives from groups such as the Audubon Society. Any changes that are required for the model's approval will be reviewed by the USFWS. Approval of the model is subject to the ATR review process.

- The UDV study results are expected to be available around July 17.
- **B. PGM Review.** Headquarters (HQ) issued a Policy Guidance Memorandum (PGM) on June 22, 2009, that details the issues/comments that must be addressed to achieve policy compliance and release of a draft document to the public. The following issues were identified in the PGM:
 - Environmental mitigation, environmental compliance (Endangered Species Biological Assessment and USFWS consultation), and ecological mitigation (model approval, incremental analysis, specific mitigation plan) were primary concerns. This was expected because only a preliminary draft of the Environmental Mitigation Plan had been submitted with the review package. The draft FR/EIS needs to comply with the requirements in Section 2036 of WRDA 2007 and include a specific feasibility-level plan to mitigate fish and wildlife losses caused by the project. In addition to mitigating effects on wetlands and bottomland hardwoods as in the past, the plan must mitigate for migratory birds, wetlands, and Preble's mouse habitat. The plan will incorporate habitat units evolved from the ongoing ecological modeling and incremental analysis. A monitoring plan is also needed to show how the mitigation is accomplished and maintained. The plan for mitigation areas should include description of lands of interest/to be acquired, types and amounts of restoration (incremental cost analysis), parties that will be part of operations and maintenance (O&M) (Colorado Division of Wildlife, USFWS, the Corps), contingency plans (Adaptive Management Plan), how impacts will be managed, and reports on mitigation, timeline, completion, and benefits. The six-step P&G guidelines will be followed.
 - A Real Estate plan needs to be developed. HQ wants the draft FR/EIS to be specific about lands that will be needed for mitigation, including Preble's mouse habitat and enhancements for riparian and migratory birds. The report needs to clarify what types of real estate needs are associated with each alternative, including easements, rights-of way, location of lands for mitigation, and ownership, and costs. The real estate plan, all real estate/cost engineering data, and nonstandard agreements for conservation easements must be reviewed.
 - Other major items still to be completed for the draft report include Recreation Modification, UDV and BBC analyses, and Dam Safety (seismic analysis, effects of water raise). First Cost of Storage, estimate of annual O&M costs, and cost estimates for the recommended plan and alternatives are under development and will be detailed when completed. An MCACES cost estimate will be prepared for the selected plan. The project needs to use the Corps' MCACES system to estimate the costs and these costs must be reviewed.
 - The format of the document will be changed to clarify the screening process and show relationships between the alternatives and purpose and need. The draft FR/EIS

will be revised to show how each of the alternatives address problems and opportunities, objectives, and constraints.

- Based on comments, those FR/EIS sections that discuss project authorization, implementation, and recommendations will be revised to clearly present the implementation aspect and conditional requirements of Section 808 and the fact that CDNR is authorized to perform facility modifications and mitigation for the project.
- The draft FR/EIS will be revised to clearly identify original project purposes by detailing the authorization of the South Platte River Basin projects and citing authorities where additional purposes were added and when.
- Text will also be added to more clearly explain the disposition of the recreation facilities and Denver Water's water supply agreements and role in pool regulation. The draft FR/EIS will be revised to clarify the existing arrangements with CDNR and Denver Water for regulation of storage between elevations 5,423 and 5,432 feet.
- Additionally, the purpose and need statement will be clarified to state that Chatfield Reservoir is only one component to help meet the overall water supply needs in the Denver Metro area.

The project plans to use vertical teaming to evaluate and resolve issues. Any additional comments from the group should be directed to Tom Browning, who will distribute them for disposition. HQ has asked to review the document again after comment incorporation and before the draft is released. This action will impact the schedule.

- **C. Other Items:**

- **Operations Plan.** Fred Rios (Corps) had questions about how the reallocation could affect operations, such as how inputs to and discharges from the reservoir will be managed, gate changes, effects up and downstream, and exchanges. While daily effects are not specifically known, Eric indicated that inflow and outflow scenarios were evaluated as part of the hydrological model, and downstream flows were addressed as part of the downstream flood damages model. Eric also indicated that the District already has a Chatfield engineering model that shows no increase in water levels downstream as a result of the project. In addition, analysis of flood frequency downstream shows no increased risk. Although no negative impacts are anticipated, the Mitigation Plan will discuss adaptive management. Actual conditions may not be reflected in the models, but any unforeseen impacts can be addressed as part of mitigation. Mike Mueller (Sierra Club) suggested that some of these issues could be addressed at a meeting planned in August to discuss potential downstream flow issues or a separate meeting could be held if necessary.
- ***Loss of Upland Habitat.*** Eric wanted to know whether there were any critical path/timing concerns on the part of State Parks. The draft FR/EIS needs to address conceptual mitigation measures to preserve Park resources. Ken Brink (State Parks) brought up concerns over the potential loss of up to 500 upland acres due to inundation on the west side of the reservoir, and concerns over net loss of recreational acres, size of the park, and buffer areas. He observed that less acreage would be lost if some could be converted to wetlands. Eric responded that the UDV and BBC analyses would help evaluate the situation. Rick McLoud (Centennial)

stated that in-kind replacement of recreational resources is a goal, and Ken said that State Parks would like this language to be included in the draft document. Mike Mueller (Sierra Club) asked whether private land could be used for environmental and recreational mitigation to replace any loss. He also wondered whether the inundated areas could correspond to planned borrow areas. Eric noted that the EDAW study already considered the area that would be inundated and potential placement of the borrow areas.

- *Borrow Areas.* Dan Weber (State Parks) asked how the borrow areas fit into EDAW's plan. Could the borrow areas cause greater impacts than originally anticipated? Tom says that a set of drawings have been prepared that show plan and profile views of the borrow areas and what they might look like after material is removed/excavated. The change in contours could impact views, recreational use, bird use, etc. Ann Bonnel would like to see a visual of the raised areas after re-grading to provide a three-dimensional perspective. John Hendrick (CWSD) observed that this type of view/perspective could provide positive images for a slide show that could be presented to the public to win support. Eric pointed out that such a value engineering study would take additional time and money to prepare and the EDAW study will already address recreational impacts.
- *Depletions.* Karen Sitoski (Corps) asked about depletions. Gary Drendel indicated that the Corps and Tetra Tech have met with the USFWS to address depletions. Per USFWS directions, the Biological Assessment (BA) will include the SPWRAP BA template that will address Threatened and Endangered federal species and recovery plans in the Platte River in Central Nebraska. Tetra Tech has completed an internal draft of the SPWRAP BA template. All water users are members of the SPWRAP program and need to continue to pay annual dues.
- *Phased Implementation of Recreation Modification Plan and Environmental Mitigation Plan.* Gary and Rick McLoud (Centennial) discussed the phased implementation approach and where in the document it should be detailed. Recreational modification and environmental mitigation need to be integrated. The approach addresses impacts from both inundation and recreational facility modifications and seeks to use adaptive management to maximize recreational experience while implementing environmental mitigation. The report will describe the recreational features that must be modified before the pool levels are raised, how they will be affected, and what replacement facilities will be constructed. Storage would not be allowed until recreation modifications are complete, with milestones for environmental mitigation that would allow storage at various levels. Recreational facilities could be moved to new areas and then storage implemented. The EDAW study provides a conservative estimate of the construction schedule. Recreational modification will occur during the first 2 years. Impacts would be monitored, for 3 to 5 years or longer, and the actions would be evaluated for effectiveness. The document needs to address monitoring, adaptive management, and how environmental and recreational mitigations will be integrated to maximize benefits. The phased approach could be described in the Recreation Modification Plan (EDAW report) and in the Environmental Mitigation Plan, and summarized in the FR/EIS.
- *Financial Considerations from a Phased Approach.* Ken Brink (State Parks) asked how the phased approach might affect revenue-generating facilities at Chatfield State

Park. Concessionaire revenue funds the Park, and sustained revenue levels need to be maintained during construction. Will the Park have some guaranteed level of revenue? Mike Mueller (Sierra Club) added that concessionaire revenue loss would also impact other parks that are supported by operations at Chatfield. State Parks requested language in the draft stating Chatfield State Park will remain open and concessionaires allowed to operate to the maximum extent possible during project implementation. If this is not possible, then the document should describe how compensation will be determined and paid. The EDAW Recreation Modification Study and BBC Socioeconomic Impact Study may help address these questions. Eric responded that phasing plan/effects on revenue need to be documented, but that this issue should be resolved among the water users and State Parks. This socioeconomic issue could be addressed in Chapter 4 of the draft document.

- *Geotechnical and Seismic Analysis, Dam Safety.* The seismic hazard analysis at the site is ongoing and is a parallel process. The District will continue to work with the vertical team on these issues and will ensure that dam safety findings are included in the draft FR/EIS and are considered prior to issuance of a contract. The project should receive liquefaction and slope stability results by the end of summer, and can determine at that time whether additional study is required. Charles Perry, head of the USACE Dam Safety division, has indicated that Chatfield Dam has a Dam Safety Action Class (DSAC) of 4. If there is a concern about slope stability (dam stability), then further investigation can be conducted. Will the project need to wait for a new DSAC rating if negative findings occur? Charles says that the project can be put into a queue and classification re-done if needed.

4) EIS Discussion Items:

- **A. Environmental Mitigation Plan (ERO & Tetra Tech).** The PGM review indicated that major items still need to be completed for the draft report. Tetra Tech and ERO are working to complete the Environmental Mitigation Plan. The plan is being expanded to quantify impacts of the reallocation project on Preble's mouse, birds, and wetlands using an EFU approach; identify actions necessary to mitigate impacts; and establish implementation processes including adaptive management and monitoring. Ongoing work considers critical habitat under the Endangered Species Act, on-site mitigation for resources lost from full inundation, and off-site mitigation (future land contracts) to address connectivity, buffers, etc. needed to achieve equivalent functionality as the committed acreage. The Environmental Mitigation Plan will be consistent with the Douglas County Master Plan and USFSW plans for Preble's mouse recovery, and will show what extra value the project will bring in addition to what other plans will accomplish.
- **B. Recreation Modification Analysis (Corps & State Parks).** The EDAW Recreation Modification Study is 95% complete. EDAW, State Parks, ERO, and CWCB are refining the re-grading plan, including cut-and-fill details for three critical elevations and potential borrow areas. Results of borehole drilling and geotechnical testing to confirm suitability will be incorporated. Recreational modification will occur during the first 2 years. The draft FR/EIS will include a summary of the recreation-economic evaluations (i.e., UDV study and BBC study). The EDAW report will also describe the recreational features that must be modified before the pool levels are raised, how they will be affected, and what replacement facilities will be constructed. The UDV data, when available, will be used to quantify NED benefits/losses for project recreation. There was some concern that HQ

would require a detailed feasibility study and cost analysis; however, the Recreation Modification Plan will not need to follow the six-step P&G guidelines.

- **C. UDV Analysis and BBC Study (Corps and State Parks).** The draft FR/EIS will include an economic evaluation using UDV and information on possible socioeconomic regional impacts. Betty Peake (Corps) expects to complete the UDV analysis report and spreadsheets showing how recreational enjoyment could be affected by the project around July 17. The BBC will consult with Betty and is expected to complete the economic analysis report within 30 to 45 days after the UDV information becomes available.

5) Public Involvement (CBCN/WebbPR):

Sarah Oehler (WebbPR) provided an update on the Website. She reported that there was a small uptick in activity following the news story on Channel 4. Brooke Fox (Chatfield Basin Conservation Network) and Sarah discussed the need to work with State Parks, the Corps, and water users to address public concerns in a proactive manner, educate the public, and develop streamlined protocol to respond to media and public groups in a consistent manner. They would like to get feedback from Park personnel about the questions they receive from Park visitors. Currently, all parties with questions receive the flier. However, would it be beneficial for each visitor to the Park to receive a flier? People see the public notice signs, but don't always know that a flier is available. Perhaps giving a flier to all users, one per car, would help to educate the public about the project. The question of developing a new flier as project implementation approaches was also discussed.

6) Wrap-up—Next Steps and Meeting Date:

- Next meeting date: Thursday, August 13, 9:00 am–11:30 am, Tetra Tech conference room on 10th floor.