

Chatfield Reallocation FR/EIS Study Meeting

Tetra Tech Conference Room, Lakewood, Colorado

Thursday, October 22, 2009: 9:00 am–11:30 am

1) Introductions and General Announcements (Colorado Water Conservation Board [CWCB]):

- Tom Browning (CWCB) welcomed the group and introduced the agenda. Topics included Study Updates (project management, pending response to EPA letters, seismic analyses, and Real Estate Plan); EIS Discussion Items (environmental mitigation, designation change for Preble's critical habitat, recreation modification analyses, socioeconomic analyses, and public involvement), and Wrap-Up. The meeting attendees introduced themselves.
- Tom announced that a meeting would be held directly following the FR/EIS study meeting to discuss issues, analysis, and environmental management strategies related to tree resources potentially impacted by the Chatfield Reallocation project. State Parks, Division of Wildlife (DOW), the Corps, Tetra Tech, and ERO attended the meeting.

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

a. Project Management

- i. Gwen Jarrett, New Project Manager—Eric introduced Gwen Jarrett (Corps) to the group. Gwen will serve as Project Manager for the Chatfield Reallocation project while Eric is on 6-month temporary assignment for the Corps (see below).
- ii. Eric Laux, Temporary Duty (6-month assignment)—Eric will serve temporary duty with the Corps Regulatory/Technical Outreach Program for 6 months beginning in mid-January 2010. Under the current schedule Eric anticipates that the Draft EIS will be essentially complete by that time, and anticipates a smooth transition between Gwen and himself.
- iii. Recap Recent Visit by New District Commander (Colonel Ruch)—Colonel Ruch recently visited Corps project sites in the Denver area, including the Chatfield Reallocation project. During three briefings the Colonel was given an overview of the project, including importance of the project, funding, and 404 permit issues with EPA. Colonel Ruch was supportive of the project and understands project needs.
- iv. IEPR and Contract Modification (ARRA funding)—Of the \$160,000 of ARRA funds in the budget, \$80,000 has been allocated to perform the required internal technical review (IEPR). These funds are thought to be adequate based on the Scope of Work developed for the internal review. The remaining \$80,000 was allocated under a contract modification to fully fund Tetra Tech's efforts to complete work on the Draft EIS.
- v. Summarize Current Budget and Schedule—Eric hopes to submit the Draft FR/EIS for internal technical review in December 2009 so that it will be available to the public in January 2010. Much of the remaining work on the Environmental Mitigation Plan is

being completed by ERO. Rick McLoud (Centennial) explained that preparation of the Environmental Mitigation Plan is on schedule. The functional output analyses have been completed and Rick estimated that ERO would submit a final draft to Eric for review in about a week. Tetra Tech will develop the cost effectiveness/incremental cost analysis (CE/ICA) now that the Preble's Mouse environmental model is approved. Gary is scheduling a meeting between Chuck Hillerson and Mary Powell to kick-off this work. The Real Estate Plan is still under development. Real Estate specialists need to work with ERO to determine incremental real estate costs. Corps HQ needs to review all costs before the draft FR/EIS can go to the public.

Eric noted that funding has not been allocated by the House or Senate for FY10, although sufficient funds are available to get the Draft FR/EIS to the public. Eric estimated that the project needs about \$90,000 to go forward after the draft report is completed. Limited funds (approximately \$50,000 based on total FY09 funding levels) might be allocated to the Chatfield Reallocation project in FY10 through reprogramming without going back to the subcommittee. The ARRA funds must be contracted, and are not permitted to cover day-to-day activities by the Corps. Marge Price (Capital Representatives) is working on securing funding in an omnibus bill. She says that the subcommittee is aware of the Chatfield Reallocation project and will respond as quickly as possible if a request for funds is made.

Rick McLoud asked whether the partners would need to provide additional monies. Tom (CWCB) stated that the state was not planning to ask the water providers for more funds at this time, and that the in-kind or cash reserves should be sufficient.

- vi. Upcoming Meetings with Sponsor to Focus on Future Study Needs—The Corps and state will work together to evaluate future funding needs.

b. Pending Response to EPA Review Letters

- After review of EPA concerns detailed in the May 2009 letters over need for a 404 permit, scope of 404(b)(1) analysis, and NEPA requirements, Division has determined that the Corps' P&G process will be followed. The CWA Section 404(b)(1) guidelines are part of the P&G process, and the Corps's regulatory review indicates that applying the Corps' P&Gs will lead to the same result and level of protectiveness as EPA 404 planning requirements. The Corps will work with EPA to address their concerns, however, about the project's conformity with the CWA section 404(b)(1) guidelines. Additional analysis of alternatives will be presented in the Draft FR/EIS, including impacts to water quality, wetlands, and habitat for endangered species, and a detailed Environmental Mitigation Plan will describe how potential impacts will be mitigated and monitored. The Corps plans to meet with EPA representatives to clarify the P&G process and discuss their concerns. In addition, lessons learned from other, similar, water projects will be incorporated to improve the Draft FR/EIS. Formal response letters will be prepared and sent to EPA.
- Gene Reetz (ASGD) asked Eric whether the Corps would prepare a 404 permit for any of the work. Eric responded that the Corps has study and construction authority for 404 issues, and that the Civil Works process handles CWA considerations through planning. Eric reiterated that the Draft FR/EIS would be revised to include detailed alternative

analysis results and show how the project will comply with Section 404(b)(1) requirements. The Corps doesn't issue a permit on their own projects.

- Mike Mueller (Sierra Club) observed that there are many laws and regulations that could affect the project. He thought it might be helpful for the Corps to prepare a short white paper that explained the P&G process. This is a public-related aspect because the May 2009 letters from EPA are part of the public record. Eric has developed Fact Sheets for internal use, and would consider preparing the white paper after formal response letters are sent to EPA. Rick McCloud (Centennial) asked whether Eric would consider producing a draft report to go public independent of EPA comments. Eric replied no, that EPA will comment on the draft along with the public. Rick asked if we would hold off issuing the draft report in light of EPA concerns. Eric says that the Corps has made their decision and will not consider holding the draft report, but that the Corps will try to work out these issues with EPA. Melanie Wasco (EPA—NEPA) agreed that it would be best to resolve these issues prior to issuing the draft FR/EIS.
- John Hendrick (Centennial) asked about the process to achieve closure on the issue if it persisted to the Final FR/EIS. Eric said that NEPA/404 comments from EPA would be elevated to management at the Corps and EPA for resolution.
- Tom stated that EPA Region 8 has sponsored some encouraging meetings concerning water supply planning across the state of Colorado. These projects are independent of the Chatfield Reallocation project, but show willingness to meet on common ground. Melanie agreed that EPA Region 8 has several water supply projects ongoing.

c. Seismic Analyses

- i Geotechnical and “Critical Structure” Considerations—Concerns were raised about dam slope stability and potential liquefaction during ground-shaking events. Based on conservative assumptions the preliminary factor of safety results ranged from 1.2 to 3.8; a factor under 1.3 would require further analysis. The assumptions used in the preliminary analysis were re-evaluated and the final factor of safety based on the data was considered acceptable. A new report is being prepared to document the seismic analysis and final results.

Interpretation of the structural analysis results hinges on whether the structure is critical or non-critical. Results reflect concern that the intake structure could be rendered inoperable as a result of a very unlikely chain of events that involve a 35,000-year earthquake event and flooding episodes. The project requires a waiver if a critical structure failure is indicated, even though this is basically an O&M issue, not a reallocation issue. A meeting with the Dam Safety group is planned for November 7 to discuss the structural analysis results. They will prepare a memo, document the data and analysis results, and provide recommendations concerning the intake structure. Pending the results of the meeting with the Dam Safety group, no need for further study or analysis is anticipated. Dam safety findings will be included in the Draft FR/EIS and will be considered prior to issuance of a contract.

Sandy Rayl (Corps) asked whether failure of the Strontia Springs dam could affect the integrity of Chatfield reservoir and dam. Tom replied that the capacity of Chatfield Reservoir is sufficient to contain all waters resulting from dam failure at Strontia Springs.

d. Real Estate Plan and Other Items

- *Real Estate Plan.* The Draft FR/EIS must include a Real Estate Plan that complies with the Policy Guidance Memorandum (PGM) requirements. The plan needs to clarify what types of real estate needs are associated with each alternative including easements, rights-of way, location of lands needed for mitigation (including Preble's mouse habitat and enhancements for riparian and migratory birds ownership), and costs. The project needs to determine land values to perform the incremental cost analysis and estimate mitigation costs. Because of the large area being considered, general land cost estimates will be based on currently zoned land-use, instead of determining costs for each individual property. Tom Browning has such zoning information.
- *Draft Easement Agreement.* The draft conservation easement agreement to acquire land parcels is complete. The generic agreement incorporates language provided by Brooke Fox (Chatfield Basin Conservation Network) and is subject to approval by the Corps' legal specialists. The Real Estate Plan and Mitigation Plan will contain information about easements, such as habitat units that need to be considered and mitigation value of land. The Corps has authority to acquire and manage lands, but will need to determine who will hold and implement the easements.
- *Approval of Ecosystem Models—Wetlands and Migratory Birds.* The Corps' Kansas City ATR has approved the wetland and avian portions of the Ecosystem model.
- *Approval of Ecosystem Model—Preble's Mouse.* The external peer review of the Preble's mouse portion of the Ecosystem model is complete. Final comments are expected shortly, and approval of the model is anticipated following comment resolution.
- Gene Reetz noted that the hydrological regime in Plum Creek is critical for successful mitigation. He asked how the hydrological regimes in Plum Creek will be maintained and whether in-stream flow rights need to be considered. Eric said that use of Plum Creek will enhance water flow, and that high quality water is needed for wetlands and other beneficial uses. Agreements will be in place to ensure that any impacts to Plum Creek are mitigated. In addition, monitoring will be conducted to ensure that the proper hydrologic regimes remain functional. Appropriate measures and adaptive management will be discussed in the Mitigation Plan.
- Mike Mueller expressed concern over the potential effects of climate change over the next 50 years. Gene noted that climate change models are difficult to downsize to local scales, and others in the group indicated that insufficient data exist to predict possible outcomes. Although climate change is a risk factor to be considered in the FR/EIS, no one can predict conditions 50 years in the future. Eric says the study cannot easily pinpoint where risk will occur or characterize its magnitude. The project needs to consider that mitigation efforts are subject to uncertainty and risk, which is why monitoring and adaptive management are vital pieces of the project. A contract will be in place to ensure that sensitive resources are protected and the management strategy is implemented properly.
- Melanie Wasco said that EPA is working on climate change studies and potential effects on water resource planning. She noted that climate change models contain uncertainty, and that it is difficult to model specific changes and impacts.

- John Hendrick notes that we are better off to build the Chatfield Reallocation project, even considering uncertainty over the long-term effects of climate change.

3) EIS Discussion Items:

a. Environmental Mitigation Plan (Tetra Tech)

- Tetra Tech and ERO are working to complete the Environmental Mitigation Plan and plan to meet to discuss and resolve outstanding issues. Tetra Tech will prepare the cost effectiveness/incremental cost analysis (CE/ICA) after the Ecosystem Models are approved. The ERO draft plan contains updated costs of environmental mitigation but real estate costs still need to be incorporated.
- Steve Dougherty (ERO) conducted field work in the Preble's critical habitat unit on the South Platte and met with the USFWS, the Forest Service, and Tetra Tech to present results and propose potential mitigation strategies within the South Platte area. Sugar Creek was proposed as the main potential mitigation area in this critical habitat unit. Pete Plage (USFWS) will consider the proposal. A new study of Sugar Creek conducted by CH2M Hill identified potential improvements (primarily sediment/erosion control) on Sugar Creek that could benefit critical mouse habitat (sponsors include Douglas County, US Forest Service, South Platte Enhancement Board, and Trout Unlimited). However, the US Forest Service and Douglas County cannot implement these improvements at this time due to lack of funding. The Chatfield project's mitigation strategy could potentially be integrated with improvement plans along Sugar Creek to benefit the mouse.

b. USFWS Designation Change for Critical Mouse Habitat (ERO & Tetra Tech)

- The USFWS is proposing to revise the critical habitat designation for the Preble's meadow jumping mouse in Colorado, and the resulting Federal Register notice describes Plum Creek as new potential critical habitat. Critical mouse habitat currently available for mitigation purposes in the Chatfield area is limited and designation of new critical habitat along Plum Creek could enhance the project's ability to provide beneficial connectivity and buffer areas for this endangered species. The project is required to address habitat losses within a defined zone, however, and USFWS policy does not allow use of lands not already designated as critical habitat. Because the Plum Creek critical habitat is only proposed, it cannot at this time be considered for mitigation purposes. If the proposed critical habitat designation is adopted in the future, however, the project could adjust critical habitat mitigation under its adaptive management strategy.

c. Recreation Modification Analyses (Corps, State Parks, and Centennial)

- i. CTL Geotechnical Investigations. The geotechnical contractor (CTL) expects final approval from the Corps to mobilize by the end of the month.
- ii. Next Steps. Results of borehole drilling and geotechnical testing to confirm suitability of borrow areas will be incorporated into the Environmental Mitigation Plan when available. EDAW, State Parks, ERO, and CWCB will use the geotechnical study results to finalize the re-grading plan, cut-and-fill details, and borrow areas for the Recreation Modification Analyses.

d. Socioeconomic Analysis (Corps and State Parks)

- i. UDV Study. The UDV study has been completed and the UDV Analysis report has undergone ATR review. The draft FR/EIS will include a summary of the recreation-economic evaluations (i.e., UDV study and BBC study).
- ii. BBC Study and Regional Economic Development (RED) Comments. The comments for the BBC study have been received. Ken Brink (State Parks) will review responses and the study will undergo ATR review by the Corps.

e. Public Involvement (Webb PR):

- Sarah Oehler (Webb PR) informed the group about new signs that had been posted at Chatfield by the State Parks office 2 weeks before the Labor Day weekend. The signs were located at the Chatfield State Park gates, campground, marina, and at the swim beach. It is hoped that the new signs will focus attention on the project and increase distribution of the flyers.
- The Web site (www.chatfieldstudy.org) experienced an increased number of hits in September (204 unique visitors and 274 total visits) and October as of the day of the meeting (127 unique visitors and 215 total visits). The Study Stakeholders, FAQs, and Study Schedule were the most frequently viewed pages. Several search engines and external links were used by the public to access the Web site.
- Stakeholder List: Current composition includes 592 general contacts, 100 state legislators, 46 PIOs, and 26 media. A total of 63 proactive additions have been reported to date, including 11 hotline calls, 8 e-mail requests, and 44 contacts via the “Contact Us” form on the Web site.
- Public Outreach Activities. Several public outreach activities are ongoing, including update and redesign of the Web site, work on a new PowerPoint presentation showcasing the study, composing an “update e-mail” to provide periodic project status information to the current list of contacts, and further developing the user group/stakeholder contact list to enable proactive public outreach when the draft FR/EIS is released to the public. The group was asked to consider designating an individual (or individuals) who could act as a local spokesperson on behalf of the participants.

4) Wrap-up—Next Meeting Date:

- Next meeting date: Thursday, December 3, 2009, at 9 am, Tetra Tech conference room on 10th floor (Gary will check on availability of the Conference Room and notify Tom).