

Truckee Meadows Flood Control Project

April 2005 Newsletter



March 29, 2005 Public Meeting at Rainbow Bend Clubhouse

The U.S. Army Corps of Engineers (Corps) held another public meeting on March 29th at the Rainbow Bend Clubhouse. The purpose of the meeting was to provide an opportunity for the Corps project delivery team to present a number of measures studied in response to public comments taken at the previous October and December 2004 workshops at Rainbow Bend.

Approximately 50 to 60 local residents and those interested in the progress of the project attended. Members of the Corps project delivery team, including the project manager, lead plan formulator, lead hydraulic designer and lead civil engineer.

The Corps presentation recapped studies of the following flood damage reduction measures:

- Expanded Huffaker Hills detention basin
- Expanded UNR Farms detention basin
- Channel benching at Vista Reefs
- Detention basin at Lockwood
- Detention basin at Mustang and other local pits
- Overbank excavation at Lockwood
- Channel excavation and/or dredging at Lockwood
- On-bank floodwalls at Lockwood
- Raise and/or replace Painted Rock Bridge
- On-Bank floodwalls at Wadsworth

Attendees expressed satisfaction that the Corps had "listened" to their previous comments and are investigating measures to retain the floodwaters within the Truckee Meadows area in the form of larger detention storage than previously considered at either the Huffaker Hills

or UNR Farms sites. The downstream residents encouraged the Corps to consider plans in the downtown Reno and Truckee Meadows area that are estimated to have the least downstream water surface impacts.

The Corps presented that detention at Mustang Ranch site did not appear to be a cost effective method of reducing downstream flood damage, which was met with relief by those opposed to flood water detention at this site. The Corps also presented that other local existing pits along the Truckee River did not also appear to be effective in significantly reducing the downstream flood flows.

Attendees voiced concern regarding any removal of material at the Vista reefs and increasing the downstream peak flood flows at the community of Lockwood. Additionally, it was voiced that Lockwood would be subject to major flooding if channel expansion in the reefs area were accomplished as part of the project. The Corps representatives related that all flood damage reduction measures for the regional area are under study and any adverse impacts would either be avoided or addressed by mitigation measures.

The engineering manager of the recently upgraded community of Lockwood water treatment facility (located immediately downstream of Lockwood and directly adjacent to the Truckee River) expressed that the plant would not be able to tolerate any flooding and encouraged the Corps to seriously consider all options that reduce flood flow water surface elevations in the vicinity of Lockwood.

Local community representatives voiced that in addition to measures addressing flooding impacts on the Painted Rock Bridge crossing, the McCarran Ranch Bridge crossing has also

experienced overtopping during high flood flows. The citizens are providing the Corps some photo evidence of the bridge's performance during the 1997 event.

The Corps concluded the meeting with a recap of the current study schedule, noting the draft report for public review is scheduled for September 2005, and urged all present to continue to contact the Corps, read the newsletters and watch for developments on the website. The Corps noted that this meeting and the subsequent public meetings were considered as unofficial input from the local community. The Corps pointed out that the community official comments will be accepted on the draft feasibility report and environmental documentation to be distributed in September.

You can view the presentation on the project website library.

What are "Induced Flood Damages" and what is "Hydraulic Mitigation"

When a flood project area is improved (i.e., by construction of levees, raising or setback of existing floodwalls or levees, widening of the flood plain, etc.), and peak flood flow conveyance capacity is increased, there may be unavoidable consequences for areas downstream during rare flood events. The areas downstream may not have additional flood carrying capacity or flood flow storage areas may not have additional capacity. The result of the improvement of the project construction may induce flooding and damages in areas that otherwise may not have flooded if existing conditions remained.

When a project results in unavoidable induced flood damages, Corps guidance indicates that hydraulic mitigation should be investigated and recommended, if appropriate. Hydraulic mitigation may be the improvement of downstream areas to be able to pass or store the additional peak flood flows generated by the upstream project by: raising levees, installing floodwalls, constructing detention basins, widening flood plains, and/or purchasing land

rights to periodically flood properties for short durations.

Mitigation is required by Corps Policy and National Environmental Policy Act (NEPA) regulations. Factors affecting the need for mitigation include economic justification and there are overriding reasons of safety, economic or social concerns, or a determination of a real estate taking has been made (the area impacted has been flooded to an extent, depth and/or frequency to drastically affect its beneficial use).

The on-stream flood project improvements under study along the Truckee River in the Truckee Meadows area do currently result in approximately 5 to 10 percent increases over existing rare event flood flows. The Corps and the local non-federal partners are working on measures to avoid or minimize the peak flow increase for the downstream areas and/or mitigating flood damages. These measures include: detention basins in the UNR Farms and/or Huffaker Hills areas; potential peak flow impact mitigation by habitat restoration and Truckee River channel lengthening of areas downstream of the Vista gage; and site specific improvements at Rainbow Bend and Painted Rock.

Step Six of the Planning Process – Selecting the Recommended Plan

We have come to the final step in the planning process where the recommended plan is selected from the array of alternatives that have been evaluated in Step 5 (Refer to March 2005 Newsletter). What criteria do we use? From the Corps' perspective, the purpose of selecting a plan is to purposefully choose the best alternative future path for society.

In practical terms, the Corps, by regulation, has established a straightforward method for accomplishing that purpose. The first choice is to do nothing. The second choice is to implement the (National Economic Development) NED plan. The third choice is to do something else.

Many people wonder why we consider plans that no one is interested in. One reason for this is that NEPA requires that we consider doing nothing -- this is known as the No Action Alternative. Once it is determined that doing nothing is not acceptable, the default action plan becomes the NED plan, by Corps regulation. The NED plan is the plan that meets the planning objectives and maximizes the net NED benefits over NED costs. For the Truckee Meadows Flood Control Project, this would be identified as the Combined National Economic Development/ National Ecosystem Restoration (NED/NER) plan since we have both economic benefits from flood control and ecosystem benefits from restoration.

The Corps is required to identify the NED/NER plan; however, if the non-federal partner prefers a plan that is not the NED/NER plan, that plan is designated the "locally preferred plan."

Who selects the plan? Surprise! The decision-makers make that decision -- The project delivery team does not make the decisions. The project delivery team only makes a recommendation based on Step 5, the evaluation of the plans. The decision-makers then review the team's recommendation and choose either to confirm it or provide their own recommendation.

Decision-makers vary from study to study but generally consist of the Corps supervisors, the non-Federal partner, District and Division Engineers, Corps Headquarters, Secretary of the Army, Office of Management and Budget, and finally Congress.

What's Happening With Downtown Reno?

In September 2004, the Corps informed our non-Federal partners that the downtown Reno portion of the project would not be part of the NED/NER plan due to the fact that the costs were far in excess of the economic benefits we calculated; by definition, it lacked "Federal interest." However, that doesn't mean that downtown Reno has disappeared from the Truckee Meadows Flood Control Project.

The Corps and non-federal partners have continued to look at the downtown Reno portion to find ways to reduce the overall costs of an acceptable solution and to make that portion of the project more economical for the non-Federal partners to participate in.

To date, the Corps has revised the hydraulic models to more accurately reflect the conditions of debris loading on the bridges through downtown. The Corps is also using a new methodology for the risk analysis that will lower potential floodwall heights by 3 feet. The Corps is also currently revising cost estimates to see the effects of these new studies. The economic benefits have risen slightly due to the new modeling, but not enough to make this portion cost-effective.

The Corps is also working with the Nevada Department of Transportation (NDOT) and the Federal Highways Administration to explore other potential avenues for the replacement or rehabilitation of the downtown Reno bridges that contribute to the existing flood problem.

What this will mean is that the Corps will continue to include a plan in our analysis that includes a solution for downtown Reno that is acceptable to our non-Federal partners.

Making Contact

Visit our website at:

www.spk.usace.army.mil/projects/civil/truckeemeadows

Your questions and comments on the contents of this newsletter are welcome. Please contact us at the following e-mail address:

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