



## **PINEY CREEK MAJOR DRAINAGEWAY PLAN**

Progress Meeting Minutes

April 12, 2011

### **Attendees:**

- Shea Thomas, UDFCD
- Monica Bortolini, SEMSWA
- Bill McCormick, City of Aurora
- Hoanh Tran, City of Aurora
- Clint Weisz, City of Aurora Water Department
- Curtis Bish, Aurora Parks, Recreation and Open Space Department
- Lori Tagawa, Aurora Parks, Recreation and Open Space Department, Aurora Water
- Brad Robenstein, Douglas County
- Stacey Thompson, Arapahoe County
- Lynn Cornell, Arapahoe Parks and Recreation District
- Doug Rockne, Arapahoe Parks and Recreation District
- Bill Ruzzo, Cherry Creek Basin Water Quality Authority
- Alan Leak, WRC Engineering, Inc.
- Nate Torrey, WRC Engineering, Inc.
- Jessie Nolle, WRC Engineering, Inc.

A sign-in sheet and meeting agenda were distributed to attendees prior to the start of the meeting.

### **Criteria**

Phase A discussion should include how to categorize a bridge or crossing that is not overtopping but does not meet criteria because of freeboard. Improvements that will mitigate these kinds of problems will be given a lower priority than improvements that will mitigate crossings that do overtop.

### **Reach 4 and Orchard Road Flooding**

Phase A discussion needs to include options considered for Reach 4 besides the floodwall regardless of how expensive those alternatives may be in terms of construction costs and damage to existing vegetation. Alternatives analyzed include excavation of a larger channel through Reach4 and/or online detention as well as raising Orchard Road. Parks also requested that the cost of the flood wall along Orchard Road include money for rock facing on the north side of the road and plantings along the south side of the road. Detention and channel excavation would both cause a great disturbance to existing wetlands. Detention would create a sediment-starved flow downstream of the detention pond.

### **Detention**

Unlike for many other master planning projects, detention alternatives alone, regardless of the combination, do not fully solve any of the problems along Piney Creek. They do reduce the capital costs of the additional improvements that need to be made. They also are relied upon by improvements already constructed by the City of Aurora. Phase A will be revised to state this fact more clearly.

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It was suggested upstream of the newly-constructed Caley Road improvements there may be an opportunity for online detention. This was evaluated and was determined to be ineffective in eliminating the split flow entering the Piney Creek Ranches residential area. Additional online detention doesn't help much because then downstream pond end up only detaining already-detained flows from the upstream ponds. There is a decreasing benefit with each additional on-line detention pond. Additional discussion will be added to explain this and to explain other options, regardless of their cost, that would eliminate split flow upstream of Caley Road. A more descriptive explanation of alternatives will be included.

The depth of the 500 cfs of split flow entering Piney Creek Ranches will be examined to see if it would not be possible to designate the area as Zone X.

It was suggested that detention be included in the model that currently has no maintenance agreement as one option. The proposed solution would be to acquire those agreements. Possible ponds to be added to the model would include the two pond at Eagle Bend on Saddlerock Ranches Gulch.

Retrofitting existing ponds to the new standard for EURV on detention ponds would only help low-flow events and would not help with the 100-year event. Bill Ruzzo will provide retrofit language for existing public and private ponds. Aurora's MS4 requirements to provide EURV/wetlands for water quality will be added to the water quality section of the report.

### **Phasing**

With the time most likely required to complete improvements to Reaches 6 and 7, it is probably necessary to specify that Reach 5 be dredged now and a sediment pond added at the upstream end of Reach 5. The land required for the sediment pond was just recently deeded to SEMSWA.

### **Stability**

Additional discussion will be added in the Reach 5 discussion to comment on how the stable slope was determined. This information is included elsewhere in the Phase A report but will be duplicated or referenced in the Reach 5 discussion. Bill Ruzzo commented that certain statements had been made in the Report that are critical to understand, those being that equilibrium in any reach is transient, variable, and dependent upon what is going on in upstream parts of the watershed; and that stability depends not just on slope but also on channel width and depth. The simplified model that George Cotton developed helps to identify areas of concern and to plan projects. Because improvements in upstream reaches affect downstream reaches, plans may have to be revisited over time, depending on the results manifesting from planned changes.

### **FHAD**

FHAD second draft will be submitted shortly. It will be submitted to UDFCD and will be made available to all project sponsors for review. A draft copy will not be posted on the project website.

### **Public Meetings**

The proposed boundary for the mailing list for public meetings has been provided to Aurora, SEMSWA, and Douglas County. The public meeting has not yet been scheduled.

Meeting was adjourned at 12:30 P.M.

Minutes Developed By:

  
Nathan R. Torrey