

## Willow Creek, Little Dry Creek, and Greenwood Gulch OSP Kickoff Meeting

**ATTENDEES:** Ken Mackenzie – UDFCD  
 Brad Robenstein – Douglas County  
 Ward Mahanke – Lone Tree  
 Greg Weeks – Lone Tree  
 Bill Woodcock – South Suburban Parks and Recreation  
 Monica Bortolini – SEMSWA  
 Mike Vinson - SEMSWA  
 Barbara Chongtoua – CH2M HILL  
 Cory Hooper – CH2M HILL  
 Gerald Blackler – CH2M HILL

**Copies** Suzanne Moore – Greenwood Village

**Location:** SEMSWA Office

**DATE:** April 1<sup>st</sup>, 2008

On April 1, 2008 a project meeting was held for Willow Creek, Little Dry Creek, and Greenwood Gulch Outfall Systems Planning (OSP) Project. This meeting summary documents the key items discussed at the SEMSWA office. Please notify Barbara Chongtoua if your notes differ significantly from these.

### Action Items

**TABLE 1**  
Action Items

Action Item	Item Description	Responsible Party
Future Land Use for Arapahoe County and Douglas County	Acquire future land use data from AMEC and Check Douglas County Land use to see if it has changed for the area	C. Hooper / M. Bortolini / B. Robenstein
Operations Manual for Englewood and Holly Dams	Provide Copies of Operation Manuals	K. Mackenzie
Ownership of Heritage Hills, Ridgeway and Other Regional Ponds in the Area and Master Plan Documents	Determine which ponds will need to be included in the existing hydrologic model and provide the Master Plan Documents	W. Mahanke / C. Hooper
Send Contact Information for Other Attendees	Provide CH2M HILL with a list of other attendees that need to be invited to the progress meetings	K. Mackenzie / Team
Drainage Inventory	Provide information from Lone Tree and Douglas County drainage	W. Mahanke / B. Robenstein

**TABLE 1**  
Action Items

Action Item	Item Description	Responsible Party
	inventory files.	
Willow Creek .shp file and Contour data	Provide the Willow Creek Shape File so that Douglas County can clip contour data for the basin	G. Blackler / B. Robenstein
Average Annual Event	Determine relevancy of average annual event for study	K. Mackenzie
List of Crossings Needed for Project	Develop a list of channel crossings that will be needed for the project	G. Blackler / C. Hooper
Project Schedule	Develop project schedule	B. Chongtoua
Progress Meeting	Schedule next progress meeting	B. Chongtoua

## Meeting Objective

Ken wants the meetings to occur when CH2M HILL has progress to present on the project. They do not necessarily have to occur bi-weekly. The purposes of the meetings are for CH2M HILL to present the progress to date and to consult with the team about data requirements or needs and the path forward.

## Introductions

### Team Roles

CH2M HILL discussed the roles and team members that will be present for this project and they are as follows:

- Mark Glidden: Principal in Charge
- Barb Chongtoua: Project Manager
- Cory Hooper: Technical Engineer
- Gerald Blackler: Project Engineer

### Communications

Ken needs to be copied on all emails between the owner representatives and CH2M HILL. The contract exists between UDFCD and CH2M HILL. For this reason, Ken needs to be aware of all decisions and changes concerning the project to ensure that the scope of work in the contract is followed.

Ken will provide a list of attendees that need to be invited to each progress meeting in addition to the local sponsors. Some of these representatives are US Army Corps of Engineers, Colorado Department of Transportation (CDOT), Heritage Hills HOA, Denver Water, Southgate Utility, and Willows Utility District.

## Data Gathering

CH2M HILL presented the data that has been collected to date. Brad commented that the land use files that CH2M HILL currently (2004/2005) has, probably have not changed, however he will confirm.

Ward will research information regarding the existing and proposed detention ponds at Heritage Hills and Ridge Gate communities. An underground storage facility included in the Parkway Master Plan will also be provided. Lone Tree is in the process of updating their drainage inventory and should have locations of existing outfalls that will be made available to the project. Land use data can be downloaded from their website. If it is not in a Shape File (.shp), then Lone Tree will create a file that is GIS compatible. Cory will coordinate this effort with Ward.

Topographic mapping for this project will be based on USGS 10' contour maps. Douglas County has 5' topographic mapping for the upper portions of the Willow Creek Basin. CH2M HILL is working with Moser & Associates to obtain the 1' contour data for Greenwood Gulch and Little Dry Creek.

Arapahoe County future land use data is available from AMEC. Monica will let AMEC know that Cory will be requesting the data for the project.

Brad will also look for outfall and drainage inventory data for Douglas County.

Ken emphasized that outfall locations are an important piece of information for this project but so are the system network in the watershed. The OSP will identify areas deficient in storm sewers and recommend improvements that will include the main stem, tributaries and sub-watershed areas.

CH2M HILL plans on walking the study area within the next couple weeks and will inform the team with dates, times and locations. Anyone from the team is encouraged to join if they can.

It was brought to the team's attention that a resident has sent an email to Bill. Ken emphasized how this kind of knowledge is important to the project. To gather more knowledge from the residents, Ken wants to see a public meeting soon. The team agreed to have a public meeting after the site visit and hydrology are complete. This may occur around 4 weeks from the meeting date.

Bill mentioned that the team can use the Goodson Recreation Center that is owned by the South Suburban Parks and Recreation. The team agreed to consider this as an option and will finalize the location at a later date.

## Hydrology

CH2M HILL discussed the approach for the hydrologic analysis. It is planned to refine the sub-basin delineations for Willow Creek and to delineate the basins for Little Dry Creek and Greenwood Gulch. The team agreed that the following criteria will be used for the hydrologic analysis:

- The newest version of CUHP2005 will be used.
- No basins less than 90 acres will be delineated.

- Only regional detention ponds will be modeled in the existing conditions model. Regional detention ponds are determined by ownership and maintenance agreements but the definition of a regional detention pond for use in the OSP will be clarified at the next project meeting. CH2M HILL will review the maintenance maps published by the UDFCD to quantify the number of detention facilities in the project area. This review will determine the detention ponds which qualify as being regional.
- The existing condition is defined by the 2007 aerial photograph.

CH2M HILL asked what the purpose of modeling the average annual storm event of 0.4 inches. Ken was not sure that modeling this event is necessary and will confirm.

## Project Website

CH2M HILL will be hosting the project website. Stakeholder logos will be on the site and information will be similar to the example sheet provided by Barbara which was passed out at the meeting.

## Project Schedule and Meetings

CH2M HILL presented a tentative schedule as follows:

**TABLE 2**  
Tentative Project Schedule

Item	Delivery Date
Draft Alternatives Evaluation Report	June 23, 2008
Review of Draft Alternatives Evaluation Report	July 23, 2008
Final Alternative Evaluation Report	August 22, 2008
Team Select Best Alternative	October 21, 2008
Draft Conceptual Preliminary Report	December 22, 2008
Review of Draft Conceptual Preliminary Report	January 21, 2009
Final Conceptual Preliminary Report	February 20, 2009

## Upcoming Activities

- **Next Progress Meeting:** The next meeting will occur in approximately 3 weeks. At this meeting CH2M HILL will discuss basin delineation, design points, and hydrology.