



**MEETING MINUTES**  
**Cherry Creek Stabilization Plan**  
**Thursday January 7, 2010, 9:00am – 10:30 am at UDFCD**

**Attendees:**

Dave Bennetts	UDFCD	303-455-6277	dbennetts@udfcd.org
Barbara Chongtoua	UDFCD	303-455-6277	bchongtoua@udfcd.org
Shea Thomas	UDFCD	303-455-6277	sthomas@udfcd.org
Kevin Lewis	Denver	303-446-3658	donald.lewis@denvergov.org
Mike Anderson	Denver	720-865-3023	mike.anderson@denvergov.org
Frank Kemme	Denver	720-865-3039	frank.kemme@denvergov.org;
Monica Bortolini	SEMSWA	303-858-8844	mbortolini@semswa.org
Robert Krehbiel	Matrix Design Group	303-572-0200	robertk@matrixdesigngroup.com
Michelle Slovensky	Matrix Design Group	303-572-0200	michelle_slovensky@matrixdesigngroup.com
George Slovensky	Matrix Design Group	303-572-0200	george_slovensky@matrixdesigngroup.com

**1. Hand Outs**

- a. Agenda
- b. Profile of channel invert and 100-year floodplain. Compare new HEC-RAS model results without bridges profiles shown over 1991 Muller profiles
- c. Cross Sections comparison of 100 cross sections from the 1991 Muller study vs. 2004 topography. (Year 2004 data was used rather than the 2008 data since breaklines were provided with the older data and not with the new data)
- d. Evaluation table regarding the cross section comparison

**2. Project Coordination**

- a. Stakeholders to invite to meetings:
  - i. Gordon Robertson, Denver Parks
  - ii. Stacey Thompson, Arapahoe County
- b. Stakeholders to invite to Public Meeting:
  - i. Casey Davenhill, Watershed Coordinator, Cherry Creek Stewardship Partners
  - ii. Peggy Lehman, Denver Councilwoman
  - iii. Neil Sperandeo, Denver Water Board
  - iv. Greenways Foundation
  - v. Cherry Creek Alliance
- c. The Corps of Engineers should be contacted regarding releases from Cherry Creek Reservoir. Recommendations will be made based upon the shear stress analysis by Matrix. It is not necessary to contact the Corps at this time on a master plan regarding permitting of stabilization structures.
- d. Website to be set-up by Matrix with a link provided to UDFCD

**3. Data Gathering**

- a. Matrix already has electronic files for topography, wet utilities and parcel data for Denver and Arapahoe County
- b. Matrix to obtain files from Xcel for Electric & Gas, and from Qwest for Fiber Optics
- c. Matrix to obtain Denver Environmental Health - Water Quality data set
- d. Matrix to include Denver's environmental dataset of known landfill on maps
- e. SEMSWA to provide Storm Pipe Outfall data to Matrix
- f. Field Survey is not currently in the budget, but recommendations for field survey will be made after the site investigation. It is assumed that budget is not available for a new field survey of all 100 cross sections shown in the 1991 Muller study. SEMSWA recommended at a minimum a new field survey of the 108 FEMA cross sections. It was also noted that heavy vegetative cover in the Four-Mile Park area

might have reduced the accuracy of the Lidar survey in this reach relative to the rest of the corridor making it a possibly candidate if new surveying is to be done. The final decision for the limit for the ground survey shall be determined following the site visit by the project team.

- g. The "inventory of Wetlands and Riparian Zones" per the contract is relevant to the alternatives analysis of improvements. Matrix will classify wetlands in the areas of proposed improvements. A scientific wetlands evaluation is not required. A previous study of a tree inventory was completed by John Griffith and can be used as a reference. The 4-Mile Historic Park is the only reach with trees in the channel corridor that has not been thinned out. Others reaches have had the large trees removed for flood conveyance in the floodway or removed as invasive species.
- h. An inventory of trail inundation was discussed and it was concluded that this Stabilization Plan does not need to address trail inundation at this time.

**4. Field Visit**

- a. Matrix will conduct a field visit of the entire corridor to map areas of concern
- b. Stakeholders will use a van to tour the reach with Matrix summarizing the findings. Saeed Farahmandi, Denver Public Works, will be invited to participate in the van tour.
- c. A Field Visit of Denver Country Club will occur when there is no snow on the ground. Dave Bennetts will make arrangements for site access

**5. Work Completed To-Date**

- a. Matrix cut a new channel profile from the new HEC-RAS model, showing channel invert and 100-year water surface. This data was overlaid on the 1991 Muller profiles for comparison. The comparison is most relevant for changes to the channel invert over time. Since this is not a floodplain study, a comparison of the 100-year water surface is for informational purposes only. Matrix will identify areas where the floodplain (without bridges) appears to be higher than the effective FEMA model. Next step is to include this profile comparison in the Technical Appendix and begin a new Channel Profile with current plan view information.
- b. Matrix compared current channel cross sections cut from the 2004 topography with the 100 cross sections from 1991 Muller study. The HEC-RAS cross sections were overlaid on the 1991 report cross sections. The comparison shows areas of possible aggradation, degradation and bank erosion. The purpose of the comparison was to identify the need for new field survey. A hand-out of was provided which divided Cherry Creek into reaches of similar aggradation and degradation to comment on the results of the comparison.

**6. Approach, Action Items and Next Steps**

- a. Matrix will set up a new plan map and new profile map per the UDFCD DFHAD criteria. The already completed profile comparison and cross section comparison should be presented in the Appendix.
- b. Matrix will take pictures to compare with historic pictures at 20 locations from 1949, 1955 and 1984
- c. Matrix will map areas of erosion based upon field visits
- d. Matrix will map utility crossings using available GIS data
- e. Matrix will complete a shear stress evaluation using HEC-RAS data
- f. Areas of Concern: Of the 27 drops identified from University upstream to Cherry Creek dam, 18 have been or will soon be built, 2 are rehabilitations of existing structures and 7 are new structures.
  - i. 2 Rehabs: Drops #4 &10
  - ii. 7 New: Drops #11, 14, 15, 16, 17, 25, 26.
    - 1. Drop #11 is in an area of aggradation and may not be necessary
    - 2. Drop #26 was studied by CH2MHill and the channel was found to be very flat. Channel banks were stabilized. Drop #26 may not be necessary.
    - 3. Drops #14-17 from Monaco to Iliff is an area of concern with channel incision.

**7. Project Schedule**

- a. Alternatives Analysis Due in 12 weeks - end of March
- b. Next Meeting February 4 @ 9:00am, UDFCD offices