

## KICKOFF MEETING MINUTES

**DATE/TIME:** SEPTEMBER 10, 2018 @ 10:30 A.M.

**LOCATION:** UDFCD OFFICE

**PROJECT:** CHERRY CREEK TRIBUTARIES MDP & FHAD

---

### ATTENDEES:

Shea Thomas - UDFCD

Richard Borchardt – UDFCD

Stacey Thompson – SEMSWA

Cathleen Valencia – Arapahoe County (Engineering)

Roger Harvey – Arapahoe County (Open Space)

Craig Perl – City of Aurora

Jonathan Villines – City of Aurora

Allie Beikmann – J3 Engineering

Ken Cecil – J3 Engineering

### PURPOSE:

1. Project stakeholders and design team introductions
2. Review stakeholder known issues and project goals
3. Review project opportunities
4. Review project Scope & Schedule
5. Name the Unnamed Tributaries

### DISCUSSION ITEMS:

1. Shea provided an overview of the revised Master Planning Process, which separates the project into four distinct phases beginning with Baseline Hydrology, then FHAD for the identification of flood risks, then alternatives analysis and concluding with conceptual design.
2. The three named tributaries were previously studied with the prior 1999 OSP. The unnamed tributaries have not been previously studied.

3. Additional tributaries that were not identified in the RFP were reviewed and added. These include:
  - a. Tributary just west of northerly unnamed tributary
  - b. Tributary just south of Arapahoe Road, with apparent Foxfield Drainage Basin.
  - c. Note: Three tributaries just east of northerly tributary (Part of Cherry Creek Vistas) were noted as being part of Cottonwood Creek basin and therefore, not to be included with this study.
  - d. If adding additional reaches, UDFCD may amend the contract on a dollar/foot of additional reach length.
4. SEMSWA is supportive of adding the 17-Mile House tributary, the Arapahoe/Parker interchange tributary, and would recommend including the easternmost of the northerly Unnamed Creek tributaries since it is open channel (the one that is UDFCD Maintenance Eligible).
5. UDFCD will review the DRAFT stream layer to verify the above additional tributaries, and any others that may have been missed. The following discussion includes what may result in additional tributaries to be included, or at least problem areas that require further investigation.
6. Stacey identified an area of concern for SEMSWA that is near E. Fair Place, just north of Valley Club Acres Tributary. It needs to be investigated if this area, informally referred to as the area tributary to Grove Ranch, should drain to Valley Club Acres Tributary. The land use case is called “Legends at Centennial” and is a congregate care facility. The Fellowship Community Church sold a portion of their parcel that is now in process with SEMSWA undergoing development review. The development plan is to discharge on-site detention pond flows into the Church retention pond. The viability of the Church retention pond is also in question. SEMSWA will provide additional data regarding this specific challenge.
7. Cathleen identified area south of the southerly unnamed tributary which drains to and across a portion of the 17 Mile House property and requested that it be included with this Master Plan. This area may have been studied in the 1999 OSP but may need to be added to this scope of work to address flooding problems at 17 Mile House. Roger noted that Arapahoe County Open Spaces has developed a 17-Mile House Farm Park Master Plan, but improvements have not been analyzed.
8. Shea requested local sponsor feedback whether or not resultant floodplains are to be mapped by FEMA or remain as CWCB regulated only. Jon indicated it depends on the study findings.

Stacey indicated that SEMSWA will be consistent with other regulated tributaries within their jurisdiction.

9. Cathleen asked if the study would identify funding and Shea stated that the study would only provide cost estimates broken down by jurisdiction.
10. Rich stated that he has received a call from the Townhomes (Pioneer Hills) adjacent to Joplin Tributary regarding erosion and asked that this study verify this statement. Ken confirmed that the channel is incised with sharp bends and active erosion.
11. Ken indicated that J3's cursory review during the proposal phase indicated that few detention or water quality facilities had been observed and that the Cherry Creek Basin Water Quality Authority may be interested in adding additional water quality to these tributaries. Shea will contact Cherry Creek Basin Water Quality Authority during the Alternatives Analysis phase to discuss water quality and their potential participation.
12. Jon would like to include an analysis of flow rates and velocities for roadway overtopping conditions. Shea said this would part of the Alternatives Analysis phase.
13. Shea requested local sponsor input regarding any known detention ponds. Rich mentioned the Belleview Pond, but only if the project will incorporate this tributary. Ken mentioned RB1-Pond 4 within Joplin Tributary. Rich and Shea confirmed that it is UDFCD maintained and that it should therefore be included with the baseline hydrology. The pond near the Arapahoe/Parker Roads Interchange was also identified as one that receives maintenance. Shea and Rich agreed to look for any information that UDFCD may have for this tributary or will otherwise contact CDOT for additional information.
14. A discussion regarding data collection and areas requiring further research followed and covered the following topics:
  - a. Future Land Use Data – Aurora has made available all future land use data available for retrieval. J3 familiar with this data. Cathleen referenced the 2018 Comp Plan for the County and Stacey will verify what is available for the City of Centennial.
  - b. Shea will provide 1-foot topography; will also initiate the structure survey once all of the additional reaches are identified that are to be included with this study.
  - c. Aurora will provide site plan for Kings Point
    - i. Shea indicated that Filings No. 1 and 2 show only a temporary pond – no permanent detention. This is not currently an acceptable solution.

- d. Cathleen noted a proposed detention pond near Parker Road that is planned with the King's Point Filing No. 1 Development. It outfalls under Parker Rd. and across the 17 Mile House property. (Note: location of this pond requires clarification – J3 to follow up with Cathleen). Roger noted that we would need to know where flows from the King's Point primary arterial would go.
  - e. The southerly unnamed tributary does flow across Parker Road through an apparently adequately sized box culvert but is conveyed overland, and not within a defined channel. The alternatives analysis phase will need to identify a low-maintenance stream section for this reach.
  - f. The Cherry Creek Basin Water Quality Authority watershed model was referenced. Rich will contact CCSP to get a better understanding of what that scope of work is so that if necessary, efforts can be coordinated.
15. Shea requested that we meet again in approximately five (5) weeks. Ken to begin scheduling.
  16. Follow-up for the website is required.
  17. Additional observations by J3 and/or discussion items are summarized below:

#### **SOUTHERLY UNNAMED TRIBUTARY**

- o Mostly Undeveloped Land
  - i. *Stacey made reference to the 17 Mile House Farm Park Master Plan and indicated that Arapahoe County Open Spaces is concerned with conveyance and increased flows from upstream King's Point development across the property. Open Spaces utilizes the property for parking during the Fall Festival.*
- o Future Development
- o Multiple Smaller Tributaries

#### **CHENANGO TRIBUTARY**

- o Cherry Creek Valley Ecological Park;
  - i. *Rich stated that we may need to consider improvements upstream of trail but in general, this reach appears in good shape.*
  - ii. *Roger indicated that Arapahoe County Open Spaces would support water quality facilities on the Eco Park property.*
  - iii. *Stacey indicated that there is a large, undeveloped parcel on the west side of S Parker Rd in Centennial that is expected to develop. In addition to low-maintenance stream recommendations, this plan should recommend area to reserve for floodplain.*
- o Direct outfalls with no apparent water quality
- o Lack of regional detention

- 1999 OSP crossings of South Parker Road – Routing impacts
- Rural drainage infrastructure upstream of Parker Road
- Multiple smaller tributaries

**JOPLIN TRIBUTARY**

- Densely developed basin
- Half of basin is aligned through Cherry Creek State Park;
  - i. *Rich requested that we show Cherry Creek State Park Property on all affected tributaries.*
  - ii. *A Cherry Creek Basin Water Quality Authority Watershed Plan is under development.*
- Active construction through Pioneer Hills Development
- Reach is dominated by wetlands
- Severe right bank erosion;
  - i. *Jon indicated a narrow area between the left bank water quality ponds and the right bank Pioneer Hills Development where the drainageway necks down; the floodplain is likely not contained through this pinch point.*
- Private detention and water quality ponds
- Complex outfall structure downstream of south chambers road
- Aurora and Centennial split easement (72" and 36" RCP)
- RB1-Pond 4
- Regional detention and water quality are not present

**VALLEY CLUB ACRES TRIBUTARY**

- Southeast Regional Detention Basin – verify;
  - i. *Stacey identified the pond at Northwest of Interchange. More research needed in this area as it is not clear which pond or outfall alternative was constructed.*
  - ii. *Stacey also indicated following the meeting that there is a sub-regional extended detention basin that serves the Centennial Center commercial development (NW corner of Parker/Arapahoe) that appears to tie into the Valley Club Acres outfall system.*
- 12' x 6' RCBC – verify as it impacts basin area
- Drainageway predominantly contained in storm sewer
- Only 600 feet of open channel; all of which are within Cherry Creek Floodplain
- Challenging design will be needed if existing storm is undersized

**NORTHERLY UNNAMED TRIBUTARY**

- Largely within Cherry Creek State Park
- Regional detention and water quality are not present
- Active bank erosion

**SCHEDULE**

Kickoff Meeting	September 10, 2018
Progress Meeting (+5 Weeks)	TBD
Submit Draft Baseline Hydrology	November 16, 2018
Complete Review of Draft Baseline Hydrology	December 7, 2018
Comment Review Meeting	December 10, 2018
Complete Corrections to Draft Baseline Hydrology	December 28, 2018
Baseline Hydrology Approved	December 31, 2018

**ACTION ITEMS**

1. UDFCD (Shea) to review DRAFT stream layer to confirm additional tributaries for inclusion.
2. SEMSWA (Stacey) will provide additional drainage information for the area tributary to Grove Ranch Drainage.
3. UDFCD (Shea) to contact Cherry Creek Basin Water Quality Authority during the Alternatives Analysis phase to discuss water quality and potential participation.
4. UDFCD (Shea and Rich) to research additional information that may be available for the pond at the Parker/Arapahoe Road Interchange; this may require contacting CDOT.
5. J3 (Ken and Allie) will obtain as much public land use data that is currently available and request assistance from Stakeholders where necessary.
6. Arapahoe County (Cathleen) will provide J3 with additional information regarding the 2018 Comp Plan.
7. SEMSWA (Stacey) will verify availability of GIS layers for impervious land use areas what land use data from Centennial and provide what is available.
8. Aurora (J3 did not note a specific person) will provide site plan for King's Point
9. J3 (Ken and Allie) will follow up with Cathleen regarding Item 13.d
10. UDFCD (Rich) will contact Cherry Creek Basin Water Quality Authority to better identify the scope of work for their Watershed Master Plan.
11. J3 (Ken) will schedule a progress meeting
12. UDFCD (Rich) will relay website discussion to Shea for direction regarding web-based master plan.
13. J3 (Ken and Allie) will roll out project website in approximately two weeks.