

# MINUTES

## First Creek Tributaries

### Master Drainage Plan

Kickoff Meeting, Wednesday, June 13th, 2018, 10:30 pm – at City of Aurora

Attendees:

Name	Organization	Phone	Email
Teresa Patterson	UDFCD	303 455 6277	tpatterson@udfcd.org
Sarah Young	City of Aurora	303 739 7279	syoung@auroragov.org
Craig Perl	City of Aurora	303 739 7532	cperl@auroragov.org
Stacey Thompson	SEMSWA	303 858 8844	sthompson@semswa.org
Sue Liu	Arapahoe County	720 874 6546	sliu@arapahoegov.com
Jeanne Boyle	Merrick	303 800 9036	jeanne.boyle@merrick.com
Colin McKernan	Merrick	303 800 9030	colin.mckernan@merrick.com
Clare Steninger	Merrick	303 800 9074	clare.steninger@merrick.com

1. Introductions
  - a. Merrick project team: Jeanne, Colin, and Clare attendees. Other employees will be a part of the project team as necessary.
  - b. Sponsors: UDFCD, Aurora, and SEMSWA.
    - i. Arapahoe County, development stakeholders, and others as necessary to provide input.
  - c. Project communication
    - i. Website – launch page should be set up before next progress meeting. Meeting notices will be posted to provide notice to stakeholders.
2. Project Scope – area of interest is tributaries to First Creek upstream of I-70
  - a. Phases: hydrology, hydraulics, alternatives analysis, and conceptual design.
  - b. Not updating hydrology for the main stem, just the tributaries indicated in the original scope
  - c. Naming tributaries – Aurora will check with Open Space and Maintenance if any naming conventions are currently used. Team will decide prior to submitting the hydrology report.
3. Available Data
  - a. Mapping, GIS data
    - i. Contours – 2013 Lidar.
    - ii. COA Open Portal – has GIS data available for download including stormwater, ponds, wastewater, boundaries, planimetrics, etc.

- iii. Arapahoe County – urban land use plan and county transportation system mapping are available
  - b. Previous Master Plans and On-going developments
    - i. No FHAD, MDP, or OSP has been done for these tributaries, only for the main stem of First Creek. The City and SEMSWA may be interested in adding a FHAD for this area in the future.
    - ii. Aurora will send (or direct Merrick to) the MDPs or FDPs for Eastern Hills, Harmony and other developments. Arapahoe County/SEMSWA will provide drawings for Sky Ranch Pond D. Merrick has access to other Sky Ranch master planning documents.
    - iii. IGA for First Creek main channel should be referenced and considered in this study.
  - c. Land Use – Existing and Proposed Imperviousness
    - i. City has existing imperviousness surface data as GIS layer. Future imperviousness layer not developed. City will send anticipated future development map when finished.
    - ii. Use zoning categories, 2018 County Comprehensive Plan, MDPs, and FDPs for future imperviousness values.
      - 1. County may have GIS for land-use zones.
    - iii. Compare Aurora and SEMSWA values for land uses and imperviousness and discuss at next progress meeting.
  - d. Regional detention
    - i. Pond inventory is available on COA Open Portal. Indicates private vs. public ponds. Private ponds will not be included in baseline hydrology but may be considered for retrofitting in alternatives analysis.
    - ii. Regional ponds currently or soon to be built (within the next year) will be included in baseline hydrology. This includes Pond D in Sky Ranch.
    - iii. Merrick will determine the ponds within the study limit and the team will discuss at the next progress meeting.
    - iv. Other master planned ponds (i.e. Sky Ranch T9 and T12) may be considered in alternatives analysis.
- 4. Models to Use and Storm Events
  - a. CUHP 2005 Version 2.0.0, EPA SWMM 5.0 models
  - b. Storm events studied: 2-year to 500-year
- 5. Project Specifics
  - a. Channel improvements near Powhaton Road have redirected a tributary further north.
  - b. Neighborhood near Adonea may have major conveyance underground.
  - c. Mississippi and Hayesmount area may annex into the City. More information about land use in this area is to be determined.
- 6. Deliverables for Baseline Hydrology

- a. CUHP/SWMM models
  - b. Hydrology Report
  - c. Other deliverables to be discussed for following phases.
7. Billing information
- a. Invoicing – Merrick will send to Teresa
8. Schedule
- a. Anticipated Schedule – see attached anticipated schedule
  - b. Next progress meeting – 8 weeks. Approximately week of August 6th
    - i. Tributary alignments
    - ii. Watershed delineation
    - iii. Land use and percent imperviousness values
    - iv. Ponds to be included in baseline hydrology
9. Project Goals:
- a. Clearly define intent of improvement goals and objectives for future implementation.
  - b. Inform, guide, and provide expectations of development effects on water quality, stabilization, flood risk, etc.
  - c. Potentially provide stream management corridors for more natural stormwater conveyance
  - d. Integrate proposed improvements with realistic location of future trails, open space, traffic master plans, and developments
  - e. Develop guide for future vegetation and provide reference for roughness coefficients for maintenance purposes.

Action Items:

- Aurora – research naming conventions for these tributaries
- Aurora – provide existing impervious surface data
- Aurora – provide MDPs and FDPs for Eastern Hills, Harmony, and other developments
- SEMSWA/ Arapahoe County – Plans for Pond D at Sky Ranch. To be used for baseline hydrology model.
- Merrick – set up project website and send link to Teresa
- Merrick – collect data
- Merrick – delineate watersheds, subbasins, and stream network. Verify stream network shown in Appendix A of RFP
- Merrick – determine land use and imperviousness values
- Merrick – determine private, public, and regional detention ponds to be discussed at the next meeting.