

# MINUTES

## First Creek Tributaries

### Master Drainage Plan

Progress Meeting, Thursday, August 30th, 2018, 3:30 pm – at Merrick

Attendees:

Name	Organization	Phone	Email
Teresa Patterson	UDFCD	303 455 6277	tpatterson@udfcd.org
Craig Perl	City of Aurora	303 739 7532	cperl@auroragov.org
Jon Villines	City of Aurora	303 739 7646	jvilline@auroragov.org
Stacey Thompson	SEMSWA	303 858 8844	sthompson@semswa.org
Jeanne Boyle	Merrick	303 800 9036	jeanne.boyle@merrick.com
Clare Steninger	Merrick	303 800 9074	clare.steninger@merrick.com

A memo was sent to the project team on August 9th, 2018, describing the tributary delineation and land use categories Merrick will base the hydrology on. This meeting was to discuss the items presented in that memo.

1. Tributary Delineation

- a. The tributaries Merrick delineated were similar to the tributaries presented in UDFCD's draft flow paths for tributaries greater than 130 acres. This confirms the main tributary paths are reasonable.
- b. Some of the subcatchments that were delineated were small or had interesting shapes. Merrick will investigate the sizes and shapes based on contours and edit as appropriate.
- c. The upper limits of each tributary should have a subcatchment about 130 acres. The scope of the study dictates that improvements for the tributary will only be investigated when cumulative area meets or exceeds 130 acres. Merrick will revise subcatchment boundaries that were previously split at roadways and edit tributary paths at the upstream reaches of the tributaries to be where 130 acres actually comes together.
- d. Merrick will perform a site visit to clarify determine the actual flow path for several potential split flow locations. If it is not obvious, then the topo data should be used to determine the flow path.
- e. Additional information about the Harmony development and proposed flow paths can be found in the Harmony Master Drainage Study. This may influence subcatchment divides in the Powhaton and Alameda area.

2. Tributary Names

- a. Merrick initially named the tributaries numerically based on the 1986 Simons and Li Drainage Basin Plan. Existing developments did not use these names in their drainage reports. The project team would prefer more descriptive names than numeric values. However, these numbered tributary names will be referenced in the report.
  - b. After some discussion, the project team agreed that tributary names should reference major roadways names instead of development names as developments can go through many names before being built.
  - c. Merrick will develop names base on streets and send to the project team for review. Teresa will ask Shea about other naming conventions in the area.
3. Land Use
- a. There was a typo in the memo. "OS" should refer to Open Space not Office Space. The percent impervious for this land use is 2%.
  - b. The Road land use would likely include the right-of-way (ROW) area and not just the pavement. The 100% imperviousness would be too high if all the ROW area was included. Teresa will investigate typical values for ROW. However, this land use is only found along I-70 and E-470, so this land use could be changed to "Freeway" instead of "Road".
  - c. For areas that had both City and County zoning categories, the areas that are currently incorporated into the City used City zoning over County.
  - d. The "Mixed Use" from Arapahoe County's Comprehensive Plan does not have specifics as to what the typical density will be. For the Sky Ranch and Prosper development areas, the May 2018 Comprehensive Map land uses will be used. Merrick will digitize the boundaries if GIS data is not available from Arapahoe County.
  - e. From aerial imagery, there appears to be an existing oil well site east of Hayesmount. The team decided to include this site in existing and future land use calculations. The Lone Tree well (planned for across the street) will only be used in future land use calculations.
4. Other
- a. The aerial imaging that will be used is 2017 World Imagery from the ESRI (ArcMap) database. This will be referenced in the report.
  - b. The regional detention pond southeast of Alameda and Hayesmount originally proposed in the 2010 First Creek MDP was an inline pond and therefore wouldn't influence any of this study's tributaries. An area for the pond will not be made for future land use as it would not be a permanent pool pond.
  - c. In the hydrology report, document dates of retrieval for shapefiles used in the bibliography.
  - d. For final maps, include labels for jurisdiction.
  - e. On final tributary map, show the major basin for First Creek (watershed divide).
5. Anticipated Schedule
- a. Draft report mid-October

Action Items:

- UDFCD – ask Shea about naming conventions
- UDFCD – investigate typical right-of-way imperviousness values
- SEMSWA – investigate if the May 2018 Arapahoe County Comprehensive Plan is available in GIS format.
- Merrick – revise watershed and subcatchment delineations.
- Merrick – continue baseline hydrology model development