

Tributaries of Willow Creek MDP Alternatives Scoping Meeting

November 16, 2022 | 11:00 AM

MINUTES

1. Attendees

- a. Jon Villines (MHFD)
- b. Jeff Battiste (MHFD)
- c. Jessica Traynor (SEMSWA)
- d. Cynthia Love (SEMSWA)
- e. Tiffany Clark (SEMSWA)
- f. Nicole Harwell (SEMSWA)
- g. Jon Nelson (SEMSWA)
- h. Craig Jacobson (ICON)
- i. Jeremy Deischer (ICON)
- j. James Duvall (ICON)
- k. Shuangshuang Fan (ICON)

2. Project Deliverables

- a. The team discussed how the alternatives analysis would be delivered.
 - i. MHFD indicated that good digital deliverables (e.g. problems data set and recommended actions) will be preferred but that this project would likely not follow the online-only approach as guidance is still in development.
 - 1. MHFD said that they would be ok if the report contained the main information, and the rest was included online.
 - 2. ICON indicated that they would be open to beta testing the online approach if it is determined that it should be included in the scope.
 - ii. SEMSWA said that they would like a **hybrid approach** and require the key deliverables in a standard report format. A detailed GIS deliverable and interactive map is also a desired deliverable. It was also noted that master plans can often become outdated fairly quickly, so it is important to consider how the analysis can be updated as new information becomes available.
 - iii. Both MHFD and SEMSWA agree that the most important thing is to have a good digital deliverable that gives users a lot of flexibility and allows for future transition to online.
- b. MHFD requested that ICON set up a meeting to further discuss online deliverables and view examples of what is being developed through the **Confluence web portal**.
 - i. In general, future deliverables aim to describe the underlying problem (the why) and focus less on the specific prescription of solutions.

3. Goals for Alternatives Analysis

- a. The team reviewed and confirmed that the previously identified alternative goals are still relevant.
 - i. Identify maintenance needs
 - ii. Improve water quality on a watershed scale
 - iii. Engage active neighborhood
 - iv. Identify capital improvement projects to reduce 100-yr floodplain
- b. ICON asked if converting riparian corridors from mowed blue grass to other wetland-type vegetation should be explored as part of this project phase.
 - i. SEMSWA commented that South Suburban Parks and Recreation District (SSPRD) is responsible for maintenance and that alternate vegetation would not be a priority at the moment
 - ii. SEMSWA did ask that a high-level analysis for an alternative vegetation option be included as a starting point for future consideration if SSPRD does decide that a lower irrigation and lower maintenance option would be attractive. This analysis does not have to include costing.
- c. MHFD indicated that a rapid geomorphic assessment (RGA) has been done by Engenuity for Spring Creek, West Spring Creek, Fox Hill Creek, Willow Creek East, and Phillips tributary.
 - i. MHFD recommended that the scope include time for ICON to become familiar with the previous Engenuity stream assessment (**Adaptive Management Dashboard**) and how the data can be utilized as a tool in recommending alternatives and developing maintenance plans. The Adaptive Management Dashboard should be seen as a living record and updates that come from the Willow Creek Tributaries MDP should be incorporated back into the dashboard.
- d. ICON asked if fluvial hazard mapping would be a product that the stakeholders would like as part of the alternatives analysis.
 - i. MHFD and SEMSWA noted that they would be open to the mapping if there is a reach that needs it; however, the watershed is nearly fully developed with narrow/defined stream corridors so there may not be many benefits in this watershed.
 - ii. The MHFD stream management corridors, and watershed scale, may provide additional information for use instead of developing FHZ mapping.

4. Discuss Key Areas / Ongoing Projects within Watershed

- a. ICON noted that the MDP alternatives analysis will extend beyond the FHAD limits and look at the entire watershed using the 2d hydraulic models and SWMM models developed in the hydrology study.
- b. In general, there are limited opportunities for new detention (full spectrum or otherwise) and proposed alternatives will likely focus on existing basins, road crossings/safety, stream function, and other water quality opportunities.
- c. The team reviewed PDFs for each tributary within the project area and discussed items that should be highlighted for analysis during the next phase.

- i. SEMSWA will send the link (see below) to the online PDF review to their maintenance staff so that they can add comments on specific known maintenance issues.
 1. [Mural Web Map for Willow Creek Tributaries MDP](#)
- ii. Homestead Farm and Homestead Tributary
 1. No issues were identified
- iii. Fox Hill Park Tributary
 1. ICON mentioned that the detention basin west of Holly Street can overflow up into the roadway.
 2. The crossing at Dry Creek Road can present safety issues during high flows.
- iv. Spring Creek
 1. ICON will follow up with maintenance to determine where previous emergency repairs have been conducted along West Spring Creek. These locations will be analyzed for possible improvements.
 2. The team noted that sculpted drop structures were constructed on West Spring Creek in a previous Olsson project.
 3. The detention facility south of 470 may provide opportunities for water quality retrofit.
- v. Acres Green and Trenton Outfall
 1. ICON asked if daylighting Trenton Outfall where it is currently piped at an existing park should be explored further. SEMSWA indicated that SSPRD is generally not in favor of the redevelopment of existing parks and that there are currently not and known plans for work on the park.
 2. It was noted that within Lone Tree/Douglas County, the upper Acres Green channel is located in the median of a divided roadway.
- vi. Phillips Tributary
 1. SEMSWA mentioned there may be some erosion around the banks of the private retention ponds east of Yosemite St.
 2. It was noted that the culvert crossing under Yosemite St. was lined in a previous project.
- vii. Willow Creek East, Kettle Tributary, and Jamison Tributary
 1. SEMSWA indicated that a higher berm for Panorama Pond is being considered to accommodate higher receiving flows in the future/built-out condition as the District (Jones District) develops.
 2. MHFD mentioned that they have performed retrofitting (trickle channel) and maintenance work in the Panorama Pond.
 3. MHFD indicated that as part of the Willow Creek project, they are going to take a look at the area upstream of the confluence with Willow Creek East.
 4. In the Jamison Tributary, it was noted that there may be capacity issues at the Dry Creek Road crossing. No CIPs are currently identified for Jamison or Kettle Tributary.

5. Next Steps

- a. Scope Alternatives Phase
 - i. ICON will develop the scope and fee for the MPD alternatives analysis.

- ii. MHFD noted that the scope should be limited to the alternatives phase, with future phases being handled by separate scopes as progress continues.
- b. ICON will reach out to additional stakeholders as work on the alternatives begins.
 - i. Arapahoe County
 - ii. Douglas County
 - iii. Lone Tree
 - iv. South Gate Water Sanitation District
 - v. South Suburban Parks and Recreation
- c. Work on the MDP is currently expected to begin in January 2023.
- d. For the MDP and alternatives analysis, the team will plan monthly meetings to discuss progress and findings.

6. Action Items

- a. ICON to develop the scope and fee for the MDP alternatives phase.
- b. ICON will meet with MHFD to discuss online deliverables.
- c. Comments on known issues will be collected from SEMSWA maintenance staff.

Minutes prepared by: ICON Engineering 11/17/22