



Meeker Creek Stream & Riparian Restoration

Question and Answer

Question: What is this project, and what is the purpose?

The Meeker Creek Stream & Riparian Restoration project will include two city-owned parcels approximately 8 acres in size. Located southwest of 10th Ave SW and 14th St SW, this project will restore a 1,000-foot long section of Meeker Creek, just upstream from its confluence with Clarks Creek. Restoration of the creek will move it from its existing confined ditch to a natural, meandering creek channel that is an area with significantly larger capacity than the current ditch. The restored creek channel will provide: flood benefits, improved salmon spawning habitat, and improved water quality.

Question: How is this project being funded?

Answer: The City has received a State grant that pays for approximately half of the project budget of \$550,000. The budget will cover the project from design, through permitting, and construction. If the project is approved, the City will hire an engineering firm to complete initial studies and design work, which is expected to take approximately 1 year. During this time, the City will provide several opportunities for public review and input on the design. When design is complete there will be a public bid to select a contractor for construction, which will likely occur in summer 2013 or 2014. Various local watershed and environment groups support the project and will assist with planting the restored creek area with native species. These groups, along with City crews, will maintain the site after construction.

Questions: Is this restoration project a new concept?

Answer: Restoration of stream channels similar to this project is a well-used practice to improve water quality and salmon habitat in areas around the Puget Sound, and across the country. With a very conservative budget and the support of partner organizations this project is aiming to complete the restoration for a cost well below similar projects.

Question: What type of waterway is Meeker & Silver Creek?

Answer: Meeker Creek is a relatively-short, and highly-altered tributary to Clarks Creek. Silver Creek is a previously-restored natural tributary to Meeker. State and City Code definitions and classifications categorize Meeker Creek (even the currently ditched section) as a “stream” and “critical area stream”. Meeker Creek supports fish, further classifying it as a stream. These classifications originate at the federal and State level and are beyond the City’s control. Historical maps detail headwaters of Meeker reaching southeast of its current start point at the fairgrounds—this portion of the creek was redirected to the state highway drainage system when Highway 512 was built.

Question: What kind of public access will there be?

Answer: Washington Administrative Code and the Shoreline Master Program strongly suggest a public access feature be included in projects located within 200 feet of a designated shoreline area, such as Clarks Creek. This could be a roadside viewing area with interpretive signs, a mulch-lined soft walking trail, boat launch or other access types. No alternatives have been selected at this time, and are subject to public comment during the design stage as outlined in the WAC and Shoreline Program.

City of Puyallup - Public Works Engineering, Stormwater Management

Mark Palmer, P.E., LEED AP - 253-435-3606, mpalmer@ci.puyallup.wa.us

Steve Carstens, P.E. – 253-841-5597, scarstens@ci.puyallup.wa.us

Joy Rodriguez - 253-841-5549, jrodriguez@ci.puyallup.wa.us

For updates on this project, visit:
<http://tinyurl.com/dydm987>



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Question: Will the excavated area be flooded during time of high ground water?

Answer: Ground water levels can fluctuate up and down by several feet or more through wet and dry seasons. Naturally, ground water flows beneath us finding its way to creeks and lakes. After excavating an area within the center of the project site by 3 to 5 feet, the perimeter of the excavation would likely exhibit groundwater seeps along the side slopes which would flow along the surface to the creek channel. Specific drainage patterns will depend on the nature of site soils, which are not currently known, but will be evaluated during the design stage.

Question: How will the restored Meeker channel be connected to Clarks Creek?

Answer: A new confluence of Meeker with Clarks Creek is expected to be established slightly upstream of the current confluence. This will be done to match the wider creek channel, and maintain the lower flows of the creek, which will reduce erosion, prevent backwater by not constricting the outlet.

Question: What will happen to the ditch?

Answer: During the design process, it will be determined whether the existing ditch area should remain in-place, be filled-in, or the southern bank removed or a combination of the above. If the ditch is retained, it will be graded to drain so as to avoid standing water.

Question: What will happen to the stormwater pipes leading to Meeker Creek?

Answer: All existing storm pipes and outfalls that lead to the project area of Meeker Creek will be designed to positively flow to the new creek channel within the project site.

Question: What will be the capacity of a new project versus existing ditch?

Answer: The current ditch that holds Meeker Creek is very defined and confining. High-water flows that exceed the capacity of the ditch inundate properties surrounding the ditch. This project will create more than 10 times the current ditch's flow capacity, giving Meeker Creek plenty of room – within the project area – to flow during high-water events. When the high-water flows end, the creek will recede back to its low-flow channel. This project will provide the most benefit in reducing flooding during medium flood events. During extreme floods, Clarks Creek is expected to back up into the project area. The additional flood storage capacity created by excavating the new creek channel will help reduce the impacts from these extreme events, but cannot eliminate all risk.

Question: How will the project be maintained?

Answer: The restored creek and riparian area will be entirely on City-owned property which will allow access for maintenance to the riparian plantings including minimizing weed growth while the plants become established. Any work in the creek will remain as it currently is, with various federal and State permits required prior to any in-stream activity (for example: a Hydraulic Project Approval permit must be obtained from Washington Department of Fish & Wildlife, as well as permits from any other organization that may have jurisdiction over the work to-be performed).

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Question: How will sediment affect this project?

Answer: We anticipate that most sediment movement will occur at higher flow events when the low flow channel will be full and flows will spread out across the high flow channel area of the new creek channel. Due to shallower flow and more friction across this area, much of the sediment will drop out here in relatively thin layers. While we haven't calculated actual sediment loads, the volume of material expected to be removed from the project area will be such that it would take decades, if not longer, to fill this excavated area with sediment. In the meantime the City, with our partners, will be addressing some of the root causes of the erosion upstream of the site to reduce the overall quantity of sediment moving into the site.

Question: What about wetland and stream buffers in the project area?

Answer: The restored stream channel will have the same wetland and stream buffer setback distances as the existing creek. By moving the creek farther to the south, the buffer area will shift farther to the south. However, residences to the south of the site will not be affected, because the new creek channel will not be shifted that far south. The south edge of the new wetland and stream buffer will be maintained within the City's property



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