

Pocatello Urbanized Area: Pollutant Reduction Activities

Project #1: Pocatello Creek Stream Bank Restoration

Background on Site

Pocatello Creek is a tributary to the Portneuf River, which crosses Bannock County, ITD and City of Pocatello jurisdictions. About 4 miles of the stream lies within the MS4, and for almost half of that length the creek is piped underground. Pocatello Creek flows right next to or below a main road for the entirety of its path in the MS4.

Adjacent land use includes residential housing, a City park, a golf course driving range, small hobby farms, and busy arterial roads.

Over the years, significant streambank erosion has been documented along Pocatello Creek as a result of extensive channelization and adjacent land use practices. In one area, this erosion has clogged up most of a 6' diameter culvert, where the stream crosses under I-15. Both Pocatello Creek and the Portneuf River are impaired for sediment.

Extensive channelization of most of the streams within the PUA has resulted in a lack of stream visibility for much of the public. This proposed pollutant reduction activity seeks to bring attention to streambanks and address the pollution (sediment) that comes from eroding and neglected streambanks.



Severely eroded bank of Pocatello Creek.

As seen in the photo at right, this stream is very visible from an adjacent roadway, and as such provides an excellent opportunity for demonstrating riparian restoration in an urban setting in the Portneuf Valley.

The PUA permittees are conducting water quality monitoring along Pocatello Creek during the Permit term (see PUA Monitoring Plan and QAPP), which will allow the permittees to better assess the impact of the proposed pollutant reduction activities.

Proposed Project

We plan to implement at least one bank stabilization and riparian revegetation activity along Pocatello Creek using willows and other riparian shrubs.

Furthermore, we'd like to implement outreach activities with neighboring landowners and the general public to limit further channelization or use of the creek as a dumping site, and to encourage private landowners to partner with the City on future stream restoration projects within the MS4 to reduce sediment inputs and improve riparian habitat.

Tentative Project Schedule

- 2019 – Contract and execute revegetation and bank stabilization project along 300' of Pocatello Creek just below I-15. Remove sediment from culvert under I-15. Begin landowner outreach.
- 2020-2024 – Continue landowner outreach and schedule out additional restoration projects as funds and landowners permit. Evaluate project impact following permit monitoring plan.

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Project #2: City Creek Road and Trail Management

Background on Site

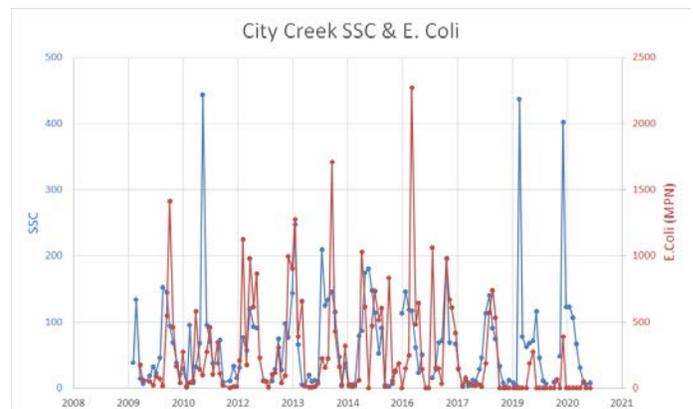
City Creek is a tributary to the Portneuf River in Pocatello, ID. About 95% of the creek lies within the MS4, with the headwaters originating just outside the boundaries of the MS4 on state and federal lands. This drainage has heavy recreation use, primarily from hikers and mountain bikers, with some ATV, motorcycle and full-size vehicle use. There is a single track mountain bike trail along one side of the creek for its entire length. A full-size vehicle road (Kinport/City Creek Rd) runs along the other side of the creek for 2.5 miles, with 3 more miles of road running uphill of the creek, but with all discharge flowing down the road or adjacent gullies into City Creek.



Example of erosion along City Creek Rd.

This road is the major source of sediment to City Creek as a result of a lack of maintenance, steep slopes and highly erodible soils. From 2009-2019, City Creek exceeded the suspended sediment concentration (SSC) total maximum daily load target 46% of the time. Additionally, sediment is known to provide improved habitat for E. coli and thus more sediment in streams increases survivorship of this bacteria, which also exceeds water quality standards during summer months.

Numerous authorized and ever growing numbers of un-authorized mountain bike trails are also contributing sediment to City Creek.



SSC and E coli levels measured at the mouth of City Creek from 2009-2020.

Proposed Project

In partnership with the USFS and State of Idaho, the City of Pocatello aims to regrade City Creek Rd to prevent water from channelizing and sending sediment-laden water directly into the creek. By decreasing sediment levels in the creek, we expect to see associated decreases in E. coli levels in City Creek as well. Reducing both of these constituents benefits City Creek, as well as the Portneuf River, which is impaired for both sediment and bacteria.

We aim to evaluate the impact of the adjacent mountain bike trail (and other mountain bike trails) on water quality and work on updating City Creek Management Plan to guide future O&M activities for this trail system to limit impacts to water quality.

Tentative Project Schedule

- 2020-2024 – Work with state and federal partners, as well as trail users, to update trail maps and O&M plan for the City Creek area. Evaluate and implement restoration projects as noted in the O&M plan.
- 2021-2023 – Contract and execute road work to reduce erosion into City Creek from recreational use of Kinport/City Creek Rd.
- 2021-2024 – Develop and implement monitoring plan to assess project effectiveness.