

ENVIRONMENTAL SUMMARY

I. Project Name: Afton Stormwater Quality and Infiltration Project

Location Description: City of Afton, Sections 14, 22, and 23 Township 28N, Range 20W, Washington County

Project Proposer: City of Afton
3033 St. Croix Trail S.
Afton, MN 55001

The proposed project is located in the City of Afton, MN, located just east of the Twin Cities metropolitan area. The majority of the stormwater collected in the city discharges untreated into Lake St. Croix, which is part of the St. Croix River, either through overland flow, pipe discharge, or ditch conveyance.

Lake St. Croix and the St. Croix River are listed as an Outstanding Resource Value Water as defined in Minn.R. 7050.0470. Lake St. Croix is also impaired for Nutrient/Eutrophication Biological Indicators and has an EPA approved TMDL plan (PRJ 06884-001).

Key objectives of the project include:

1. Constructing two bioretention features that will capture and infiltrate or filter previously untreated stormwater discharges from the City of Afton into Lake St. Croix.
2. Utilizing pervious pavement adjacent to the City Park and Tree boxes in the County Road 21 Right of Way
3. Installing three rain gardens to collect and infiltrate localized drainage areas

II. Alternatives Considered

The City of Afton considered leaving a ditch and culvert (rural section) system in place and providing updates where needed. In order to address the needs of the area and the proposed improvements, it was determined that an urban street section was the preferred option that consisted of a storm sewer collection and conveyance system with treatment Best Management Practices (BMPs).

III. Present Stormwater System and Need

The existing drainage system consists of a ditch and culvert system that does not have sufficient collection and conveyance capacity to minimize flood potential and erosion in the Downtown Village. The proposed system will consist of storm sewer catch basins, manholes, and pipes to collect and convey stormwater to the proposed treatment areas.

There are currently no BMPs or treatment devices present to provide volume reduction or water quality treatment of stormwater runoff prior to discharge into Lake St. Croix.

The existing drainage system consists of a ditch and culvert system that does not have the collection, conveyance, and storage capabilities required for the Downtown Village area. Due to lack of system capacity, there is a significant amount of flooding throughout the Downtown Village and stormwater frequently pools west of the existing levee during large rainfall events. The lack of an adequate drainage system also results in erosion and sedimentation issues. The Downtown Village is located between the bluffs and Lake St. Croix and experiences significant erosion and sedimentation during large rainfall events.

The proposed improvements will introduce significant stormwater treatment measures that will greatly reduce the amount of pollutants discharged to Lake St. Croix from the City of Afton.

IV. Environmental Impacts of Proposed Projects

A potential negative impact of this project will be erosion and sediment control during construction. Erosion and sedimentation control measures are required in the NPDES Construction Stormwater Permit issued by the Minnesota Pollution Control Agency (MPCA) and the conditions of this permit must be enforced by the MPCA. Contingency planning during construction will include a stormwater pollution prevention plan for the project as well as upstream safeguards including perimeter control, filter guards, and catch basin controls to provide a reliable means of controlling sediment if the stormwater management facilities are overwhelmed with rainfall during construction.

Other short term impacts may be expected during construction and these impacts will likely be related to dust and noise. These impacts will be managed or mitigated to the greatest extent possible through standard construction policies and BMPs.

The proposed project is not expected to have direct impacts to: threatened or endangered plants or animals, sensitive or vulnerable habitats, wetlands, floodplains, historic areas, architectural, cultural, archaeological, shore lands, or air quality non-attainment areas. At this time the Twin Cities does not have any non-attainment problems and the only air quality concerns are related to dust mitigation will be managed through the construction BMP's.

V. Public Participation Program

A public hearing was held at the February 24, 2015 City Council meeting. Members present were Mayor Richard Bend along with Council Member Nelson, Palmquist and City Administrator Ron Moorse. Approximately 12 citizens from Afton or neighboring communities also attended the meeting. Diane Hanke and Todd Hubmer presented an overview of the project and answered questions from the attendees.

At an Afton City Council meeting held on June 16, 2015, all council members present voted to adopt resolution 2015-49, formally adopting the stormwater project plan.

VI. Map of Project Location

Reference attachment Stormwater Management Improvements