COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE: June 25, 2018
AGENDA NUMBER: 6
ITEM: Request to Seek Bids- LSC Corridor Restoration Project

FISCAL IMPACT: $0
POLICY IMPACT: Policy

REQUEST
Authorize staff to seek bids for project

BACKGROUND
Sand Creek (Ditch 41 system) was added to Minnesota’s 303(d) list of impaired waters for aquatic life impairments in 2006 due to macroinvertebrate and fish bioassessments and for aquatic recreation impairments in 2016 due to elevated levels of Escherichia coli (E. coli). As part of the TMDL study, excess total suspended solids (TSS), total phosphorus (TP), poor habitat, and altered hydrology were identified as the primary stressors to Sand Creek’s biota. The primary sources of excess TSS and TP were determined to be urban stormwater inputs and stream bank erosion.

To address stormwater runoff, several District projects have been completed in the Sand Creek subwatershed over the past 5 years. These projects include the construction of 25 neighborhood rain gardens and the new stormwater pond at Xeon Street. Stream bank erosion and channel incision remain a major source of TSS and TP to Sand Creek. Specifically, based on the 2015 routine inspection of the Ditch 41 system, there are 95 active erosion sites contributing approximately 931 tons of TSS per year to Sand Creek and downstream Coon Creek. The downstream-most section of Sand Creek below Foley Blvd constitutes only 15% of the Ditch 41 system, but contributes over 60% of the total TSS load attributable to streambank erosion and is therefore considered a priority area for restoration.

In January 2017, the MPCA issued a request for proposals for FY 2017 federal Clean Water Act Section 319 grant funds. The purpose of the EPA’s 319 grant program is to provide funding to implement projects that reduce nonpoint source pollution to impaired waters. To be eligible, the impaired waterbody must have an EPA-approved TMDL study and the proposed project activities must be identified in an MPCA-approved implementation plan (e.g. WRAPS). The grantee is required to provide a 40% in-kind or cash match using non-federal funds. With the approval of the Coon Creek Watershed TMDL and WRAPS in 2016, the District was eligible to apply for 319 grant funding for the very first time. Subsequently, in July 2017, BWSR issued a request for proposals for water quality projects and practices that meet eligibility criteria for use of Clean Water Funds. These State funds could be used as the match for the federal 319 grant.

District staff applied for both grants and was awarded full funding to complete a stream corridor restoration project on the ½-mile reach of Lower Sand Creek between the Railroad and Xeon Blvd in Coon Rapids. The aim of this project is to decrease sediment
and nutrient loading by stabilizing eroding streambanks and to improve habitat for macroinvertebrates, fish, and other wildlife. To this end, a variety of BMPs were proposed:

1. Stabilization of severely eroded sites and those adjacent to City trail infrastructure using vegetated rock riprap
2. Stabilization of the remaining erosion sites using bioengineering practices such as log toes, revetments, root wads, and/or regrading to a suitable slope and stabilizing with vegetation as needed
3. Installation of six grade stabilization structures to reduce channel incision and to create habitat features (riffle-pool sequences)
4. Excavation of former oxbows to reestablish backwater pools and floodplain connectivity
5. Buckthorn clearing, tree thinning, and native plantings to allow sunlight to penetrate the overgrown canopy and promote the growth of new low-lying vegetation to stabilize banks, filter overland runoff, and provide additional habitat to aquatic organisms and pollinators

This project will make significant progress towards meeting the TMDL pollutant reductions established for Sand Creek. Sediment loading will be reduced by 279-372 tons per year which corresponds to annual TP load reductions between 112 and 312 lbs. These loading reductions exceed the TSS reduction goals set forth in the TMDL and accomplish roughly 15-35% of needed TP load reductions in Sand Creek. Additionally, because Sand Creek is a major tributary to Coon Creek, these reductions also contribute towards meeting TSS and TP loading requirements for Lower Coon Creek.

**Timeline**
At the February 13, 2017 Board meeting the Board authorized staff to pursue grant funding for the Lower Sand Creek Corridor Restoration project.

On February 16, 2017 staff applied for grant funds in the amount of $269,563 (60% of total project costs) through the 2017 Federal Clean Water Act 319 Grant Program funded by the Environmental Protection Agency and administered by the Minnesota Pollution Control Agency (Total project costs: $464,721; Grant: $269,563; Match: $195,158).

On March 30, 2017 the District was awarded the 319 Grant in the full amount requested: $269,563.

On August 7, 2017 staff applied for grant funds in the amount of $195,158 though the 2018 Clean Water Fund Projects and Practices Grant (CWF Grant) administered by the Board of Soil and Water Resources. These funds were intended to offset the 319 Grant match requirement resulting in zero out-of-pocket expenses to the District.

On November 14, 2017 the District was awarded the CWF Grant in the full amount requested: $195,158.
On March 12, 2018 the Board authorized the District to enter into a Joint Powers Agreement with the City of Coon Rapids for the implementation of the Lower Sand Creek Corridor Restoration Project.

On March 19, 2018 the District executed a 2018 Clean Water Fund grant agreement with the Board of Water and Soil Resources for $195,158.

On March 20, 2018 the District executed a Joint Powers Agreement with the City of Coon Rapids for the implementation of the Lower Sand Creek Corridor Restoration Project.

On March 26, 2018 the District executed a FY17 319 grant agreement with the Minnesota Pollution Control Agency for $269,563.

On May 22, 2018 an informational public neighborhood meeting was held at Coon Rapids City Hall.

On June 18, 2018 the MN DNR issued a DNR Waters Permit for construction of the project.

On June 18, 2018 the project site was included on the Annual Board Tour.

ISSUES/CONCERNS

2018-19 Budget Implications: This project will be completed at no cost to the District. Staff time will be reimbursed by the BWSR CWF grant.

Project Construction Estimate: $408,561

Cooperators agreements: Staff have met with 2 of the 4 private property owners and cooperators agreements are under review. To date, no concerns have been raised. The City of Coon Rapids owns the majority of land in the project area. The City is a willing partner and a JPA has been executed.

Tree Removal: The existing tree canopy needs to be thinned to establish and promote low lying vegetation necessary for long-term success of the project. The project design, including tree removal, has already been presented to park goers, immediate landowners, the adjacent neighborhood, city staff, city council, city parks and recreation commission and permit reviewers. To date there have not been any complaints or concerns about the tree removal portion of this project. In fact, most have been excited about receiving additional light along the adjacent trail and the reduction of hazards from storm damaged trees. Staff plans to publish an article in the fall city newsletter, post construction and project informational signage along the project area, and develop a project webpage on the District website to get ahead of any potential future complaints. All trees within the project area have been inventoried, surveyed, and marked with a unique identifier. A removal map will be created to achieve the needed canopy openness while preserving desirable trees. Work is anticipated to be completed during the late fall or winter when the loss of canopy will be less apparent.
Access: will be via Xeon St, Xeon Blvd and Sand Creek itself. To avoid damages the adjacent trail will not be used for heavy equipment or material access.

Active trail: Sand Creek Trail is the northern extent of the project area. Construction signage will be placed along the trail. Temporary fencing will be placed between the trail and project area to separate park goers from the construction site. Work is anticipated to be completed during the late fall or winter when trail use is relatively low.

Permits: The District has received a DNR public waters work permit and is in the final stages of receiving an ACOE permit. An NPDES and City Right-of-way permit will be obtained by the awarded contractor. A notice to proceed will not be issued until all applicable permits are received.

Utilities: Numerous utilities cross the creek or are within the project area. Staff has initiated a Gopher One Call to obtain maps of utility locations and modified the design as needed to avoid conflict. The awarded contractor will be required to have utilities marked prior to starting work.

Publication: notice for bids is required to be published in official District newspapers as project estimated cost exceeds statutory minimum. Notice for bids will also be published on the District website and Quest website.

RECOMMENDATION
Authorize staff to seek bids
**Before:**
Example of a severely eroded bank within the Lower Sand Creek project reach

**Before:**
A stretch of Lower Sand Creek with an incised channel, eroded banks, and poor riparian vegetation and in-stream habitat

**After:**
A rendering of the Lower Sand Creek Restoration project; note the root wads (A), log toe (B), restored backwater habitat (C), cross vane with riffle-pool sequence (D), vegetated riprap (E), regraded banks, and tree thinning to enhance riparian vegetation
CONSTRUCTION PLANS FOR
SAND CREEK STREAM RESTORATION

PREPARED FOR
COON CREEK WATERSHED DISTRICT

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