

COUNCIL ACTION FORM

SUBJECT: NORTH RIVER VALLEY LOW-HEAD DAM IMPROVEMENTS

BACKGROUND:

The City of Ames constructed a low-head dam on the South Skunk River in 1984 to create a pool of water in the primary recharge zone for the aquifer that feeds the City's Downtown Well Field, thereby providing a means to increase the capacity of these wells during periods of drought. While the City has never promoted recreation at the dam, it is evident that the low-head dam attracts members of the public who use the area for recreation. Low-head dams can pose a serious drowning hazard due to the recirculation effect which occurs immediately downstream. Therefore, in 2013 the City initiated a project to replace the dam with features that create safe recreational opportunities while still allowing for aquifer recharge during drought.

In April 2016, RiverRestoration.org was awarded a contract to design the project. Prior to the start of design, staff hosted a stakeholder input meeting where representatives from the Skunk River Paddlers, Iowa Department of Natural Resources, Prairie Rivers of Iowa, Parks & Recreation Commission, and an adjacent property owner were able to learn about the project and help develop a list of project goals, beyond the first and foremost goal of improved safety.

In March 2017, staff presented Council with three different alternatives for the project. Alternative A included only the minimal amount necessary to mitigate the safety risk and comply with Iowa DNR requirements. Alternative B included the full in-stream recreation components, and Alternative C added the bank-side improvements and park amenities. City Council voted to move forward with Alternative C. With that direction, staff proceeded with completion of the plans and specifications, meeting with the stakeholder group throughout the design process to get their input.

The majority of the project will take place on City-owned property; however, a small portion of the project to be constructed on the downstream end is owned by Iowa State University. The University is willing to write a letter that allows construction access on their property for the North River Valley Low-Head Dam Improvements, provided that the City be responsible for reasonable site restoration.

This project was previously bid in December, but the single bid received was substantially over the estimate and was rejected. Staff has worked with the design firm to modify the project specifications. All of the bank-side seeding and planting work is now included as a bid alternate. Should bids come in higher again the second time, this would allow the City to exclude the planting work from the contract and instead perform the work using City forces. The

specifications also now allow a longer construction window, which is expected to provide for increased bid competition and increased contractor flexibility, both of which should help in receiving more competitive bids.

Current funding for the project is as follows:

Grant Funds

Low Head Dam Safety Grant (2009)	\$ 75,000	
Low Head Dam Safety Grant (2016)	85,000	
Low Head Dam Safety Grant (2017)	112,901	
Water Trails Enhancement Grant (2017)	120,000	
Subtotal		\$392,901

Local (City) Funds

Water Utility Fund – FY 13/14 CIP	\$ 75,000	
Water Utility Fund – FY 16/17 CIP (from Source Water CIP Project)	150,000	
Parks System Improvements - FY 15/16 CIP Add Recreation Features	40,000	
Local Options Sales Tax	60,000	
General Fund (FY 16/17)	150,000	
Subtotal		\$475,000

In-Kind Donations/Services

Iowa Whitewater Coalition - confirmed	\$ 1,000	
Hawkeye Fly Fishing Assoc. – confirmed	1,000	
Ames Outdoor Alliance – confirmed	1,000	
Iowa Department of Natural Resources (construction Inspection services)	71,600	
City of Ames Park & Recreation staff (tree removal)	16,000	
Subtotal		\$90,600

Total Available Funding **\$958,501**

The current estimated cost for the project is as follows:

Total Project Costs

Engineering	\$ 112,675	
Mussel Survey (permit required)	30,153	
Construction (estimated)	716,354	
Construction Inspection	71,600	
Contingency (4%)	27,719	

Total Estimated Project Cost **\$958,501**

ALTERNATIVES:

1. Grant preliminary approval of the plans and specifications and issue a Notice to Bidders, setting March 29, 2018, as the bid due date and April 10, 2018, as the date of public hearing and award.
2. Do not approve plans and specifications and a notice to bidders at this time.

MANAGER'S RECOMMENDED ACTION:

As a result of the inherent danger of the City's low-head dam in North River Valley Park, staff has recommended a modification to the dam that will significantly reduce the downstream recirculation effect. Staff has worked diligently with stakeholders to provide an opportunity to not only increase the safety associated with the City's low-head dam, but also create a unique recreational facility not available elsewhere in the community.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as described above.