

**MEETING DATE:** January 29, 2015

**TITLE:** Authorization to pursue restoration of Reach 15 in lieu of bypass channel project

**RESOLUTION NUMBER:** 15-009

**PREPARED BY:** Becky Christopher

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**REVIEWED BY:**  Administrator  Counsel  Program Mgr. (Name): \_\_\_\_\_  
 Board Committee  Engineer  Other

**WORKSHOP ACTION:**

<input type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date): _____	<input type="checkbox"/> Refer to taskforce or committee (date): _____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input checked="" type="checkbox"/> Other (specify): <u>No action taken at workshop</u>	

**PURPOSE or ACTION REQUESTED:**

Authorize staff to pursue plans for removal of the 54<sup>th</sup> St. grade control structure and restoration of Reach 15 in lieu of the previously ordered fish bypass channel project

**PROJECT/PROGRAM LOCATION:**

Minnehaha Creek at West 54th St. in Edina

**PROJECT TIMELINE:**

2015 – Design  
2016 - Construction

**PROJECT/PROGRAM COST:**

Fund name and number: 54<sup>th</sup> St Fish Bypass, 3147  
Current budget: \$49,000  
Expenditures to date: \$0  
Requested amount of funding: \$0

**PAST BOARD ACTIONS:**

October 10, 2013 Res. 13-101: Authorization to investigate feasibility of removing the 54th St. grade control structure in Minnehaha Creek, while maintaining recreational functionality  
March 13, 2014 Res. 14-020: Authorization to work with the City of Edina to incorporate fish passage into the 54th St. road reconstruction project  
May 22, 2014 Public hearing (No action required)  
September 25, 2014 Res. 14-075: Ordering of the 54th St. Bypass Channel Project in the amount of \$118,750

## **SUMMARY:**

### Background

In October 2013, the Board authorized staff to investigate alternatives for the West 54<sup>th</sup> St. grade control structure in Edina in coordination with the City's proposed street reconstruction. The structure was recommended for removal in the District's 2003 Stream Assessment because it is a barrier to fish passage and creates an impoundment causing accumulation of sediment, degrading upstream aquatic habitat.

Minnehaha Creek is impaired for both fish and macroinvertebrate index of biotic integrity (IBI). Based on a 2003 DNR survey, fish species using the creek include northern pike, largemouth bass, smallmouth bass, bluegill, green sunfish, minnows, shiners, and suckers. While there are a number of stressors affecting fish IBI in Minnehaha Creek, habitat and connectivity are critical components.

A standing wave formed at the downstream end of the grade control structure that was a regional attraction for whitewater paddlers, and the Board directed that any alternatives maintain the existing recreational functionality. For this reason, staff recommended a bypass channel alternative that would allow for fish passage but would leave the structure intact. The Board ordered the project on September 25, 2014, and the pipe portion of the bypass channel was incorporated into the City's bid package for W. 54<sup>th</sup> St.

It was subsequently discovered that, following the record flooding of 2014, the wave is no longer forming and there has been further deterioration of the spillway presenting potential entrapment hazards for paddlers.

### Recommendation

Since the desire to preserve the standing wave was the primary reason for pursuing the bypass channel alternative, and that wave has been lost, staff revisited the idea of removing the grade control structure and restoring the upstream reach. This would not only provide fish passage but could also improve aquatic habitat upstream by decreasing sedimentation and incorporating pools, riffles, and other habitat features.

Recognizing the recreational value the structure previously provided to the paddling community and neighborhood, staff recommends that the restoration be designed in a way that incorporates whitewater features. Based on preliminary discussions with a whitewater design firm, it is believed that multiple features could be incorporated throughout the Arden Park area, and they could be designed in a way that allows fish passage and provides safer conditions for paddlers and bystanders.

Staff has discussed this concept with representatives of the Rapids Riders paddling group who were engaged throughout the City's public process for the design of W. 54<sup>th</sup> St. They are supportive of the idea and have agreed to bring a letter of support for their Board to sign at its next meeting as well as a recommendation to form a subcommittee to help advance the project. Staff has also discussed the concept with City staff, and they have indicated that the City will be satisfied if there is support from the community.

There are multiple benefits that could be realized by removing the grade control structure and restoring the upstream reach. In addition to improving stream ecology and regaining the recreational value that has been lost, the project could improve safety and convenience by eliminating the need to portage across W. 54<sup>th</sup> St. The District could also work with the City to incorporate park improvements that residents requested through the public engagement process for W. 54<sup>th</sup> St. such as controlling buckthorn and improving creek access and viewsheds.

With the City scheduled to bid the W. 54<sup>th</sup> St. project in late February, they have requested a decision on whether or not the bypass channel culvert should be included in the bid package. Staff recommends that the District abandon the bypass channel project and instead pursue plans to remove the structure and restore the upstream reach throughout Arden Park. If the Board supports this decision, staff will begin developing a concept for the restoration and meeting with neighborhood residents to build support for the project.

## RESOLUTION

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**RESOLUTION NUMBER:** 15-009

**TITLE:** **Authorization to pursue restoration of Reach 15 in lieu of bypass channel project**

- WHEREAS, there is a grade control structure in Minnehaha Creek at the West 54<sup>th</sup> St. bridge in Edina that was recommended for removal in the 2003 Stream Assessment because it is a barrier to fish passage and creates an impoundment causing accumulation of sediment and degradation of aquatic habitat upstream; and
- WHEREAS, Minnehaha Creek is on the State's Impaired Waters List for both fish and macroinvertebrate index of biotic integrity; and
- WHEREAS, in October 2013, the Board authorized staff to investigate alternatives for the West 54<sup>th</sup> St. grade control structure in coordination with the City of Edina's proposed street reconstruction; and
- WHEREAS, a standing wave formed at the downstream end of the grade control structure that was a regional attraction for whitewater paddlers, and the Board directed that any alternatives maintain the existing recreational functionality; and
- WHEREAS, staff recommended a bypass channel alternative that would allow for fish passage but would leave the structure intact, and the Board ordered the project on September 25, 2015; and
- WHEREAS, the pipe portion of the bypass channel was incorporated into the City's bid package for the reconstruction of West 54<sup>th</sup> St.; and
- WHEREAS, it was subsequently discovered that, following the record flooding of 2014, the standing wave is no longer forming and there has been further deterioration of the spillway presenting potential entrapment hazards for paddlers; and
- WHEREAS, given the loss of the wave, staff recommends that the District abandon the bypass channel project and instead pursue plans to remove the grade control structure and restore the upstream reach throughout Arden Park; and
- WHEREAS, anticipated benefits of a stream restoration project include providing fish passage, improving aquatic habitat, regaining whitewater recreation features, providing safer conditions for paddlers and bystanders, and incorporating park improvements that were requested by area residents during the City's public engagement process; and
- WHEREAS, representatives of the Rapids Riders paddling group have expressed their support for this approach; and
- WHEREAS, the City has requested a decision on whether or not the bypass channel culvert should be included in the bid package for West 54<sup>th</sup> St.;
- NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes staff to pursue plans for removal of the West 54<sup>th</sup> St. grade control structure and restoration of Reach 15 through Arden Park in lieu of the previously ordered fish bypass channel project.

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**DRAFT for discussion purposes only and subject to Board approval and the availability of funds.  
Resolutions are not final until approved by the Board and signed by the Board Secretary.**

Resolution Number 15-009 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_.  
Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: \_\_\_\_\_.

\_\_\_\_\_  
Secretary Date: \_\_\_\_\_