

May 3, 2016

Dear City Council Members,

The Friends of Bass Lake appreciate this opportunity to provide a response to the April 4th City Staff funding request for Bass Lake restoration. Enclosed please find a letter containing analysis of problems and solutions.

The Bass Lake Restoration Project is a multifaceted system of individual actions requiring agency review prior to permitting. Agency review and approval typically trigger state funding for the overall project by one or more sources. A plan for Bass Lake restoration must begin with a definition of problems and evaluate the full range of technical solutions for appropriateness, future conditions, and costs.

We look forward to partnering with the City Council to protect and restore our public waters.

Sincerely,

Scott Carpenter, President

www.friendsofbasslake.com

Letter May 2, 2016
Friends of Bass Lake

Dear City Council members,

We appreciate this opportunity to review and provide input into the April 4th City Staff funding request pertaining to the restoration of Bass Lake.

I. Outlet Structure

We believe the outlet improvement project recommended by City Staff actually requires a complete structure replacement and a substantially larger allocation of funds. This is because the current water level in Bass Lake has been maintained below the historically mandated water level. This practice has caused significant encroachment of invasive hybrid cattails, loss of open water, and loss of wildlife habitat within the basin.

The historically mandated water level was recorded as 872.0 ft. elevation and maintained at this level from at least 1978 to 2010. The outlet structure was damaged in 2010. The damage allowed the lake to drain to the bottom of the outlet pipe or to the 870.3 ft. elevation level. The difference between these elevations is roughly 1.5 feet.¹

The use of de-watering (drainage) practices in the Bass Lake basin was discussed during the last regulated dredging project performed in 1993. Directives were issued by the DNR at the time of dredging concerning the length of time the water level might be lowered without incurring vegetation encroachment.² The acceptable length of time was sited in terms of months. The practice has now been maintained for six years and exposes the city to potential audit and litigation by the EPA.³

The practice of maintaining the lake at the lower level has been advantageous to the city because it provides more capacity to the stormwater system and efficiency to the partially submerged storm pipes, thereby alleviating risk of upstream flooding. The challenge of upstream flooding in the Bass Lake sub watershed is substantial. The 2012 stormwater modeling data compiled by Barr Engineering predicts a 10 year flooding event that results in 2 ft. of flooding in the City Hall watershed node, 3.8 ft. of flooding in the Senior High School and Groves Academy node, 6 ft. of flooding in the Spanish Immersion node, and 3.9 ft. of flooding in the Sam's Club node--naming just of a few of the vulnerabilities.⁴ Restoring the Bass Lake water level to the historic normal level will exacerbate the inefficiency of the partially submerged storm pipes and increase the risk of upstream flooding.

¹ James Wisker MCWD 2009 Water level of Bass Lake <http://www.friendsofbasslake.com/lake-depth>

² EAW dredging permit 1993 authorization to dewater

³ City of Rockford, Illinois Clean Water Act Litigation Settlement 2015

⁴ Beltline LRT Stormwater Analysis Barr Engineering July, 2012

Given these vulnerabilities we recommend a budget allocation that incorporates elements of the Falcon Heights Curtiss Pond project allowing for an electronically controlled adjustable outlet mechanism connected to the weather service. This project was designed by Houston Engineering Inc. Maple Grove, Minnesota. The system anticipates and adjusts the lake level to provide the capacity necessary for storm events and then returns the lake to the normal water level.

The loss of habitat and open water in the Bass Lake basin has resulted in the invasion of hybrid cattails. State legislation passed in 2014 allows for a permit to continuously manage invasive cattails and to plant native aquatic emergent vegetation. The Minneapolis Park Board has taken on a similar hybrid cattail removal/replant project in Loring Park under a three year contract with Applied Ecological Services. We recommend applying for a DNR vegetation management permit once the water level is restored to historical level.

II. Carpenter Park Holding Tank

The Carpenter Park proposal of \$1,025,000 describes raising the level of Carpenter Park with soil excavated for a 70,000 gallon underground containment tank. The prospect of burying a containment tank and filling the low area of Carpenter Park with dug material may alleviate flooding at Carpenter Park but it does so at the expense of other low areas within the system—at best it has a neutral effect on stormwater capacity. This project expends a considerable share of funds designated for Bass Lake but appears to be more of a Carpenter Park soccer field renovation than a Bass Lake restoration.

We believe projects must be prioritized based on volume of water removed from the storm system and total phosphorous removed from polluting the public waters. Projects that contain and absorb water at the source accomplish both goals since most of the watershed flowing into Bass Lake contains high levels of phosphorous. The 2012 LRT study recommends linear street treatment (water gardens) and porous pavement projects to reduce stormwater. These practices haven't been promoted or implemented since their recommendation in 2012. In order to communicate clear, citizen understandable design standards we encourage the City Council to adopt the 2014 MPCA Minimal Impact Design Standards (MIDS) for stormwater management.⁵

III. NE Corner Pond

The City Staff recommends the allocation of \$100,000 for the construction of a pond on public land on the NE corner of Bass Lake. This pond would serve the 30 acre watershed node made up of Public Storage, industrial properties to the north, and portions of Randall Avenue. We've been monitoring pollutants coming out of this node and believe private business owners are responsible for the pollutants and the renovation of the current NE corner pond located on private property. The public forested property should be preserved as floodplain forest within the Bass Lake Preserve. Regulatory action may be required.

⁵ http://stormwater.pca.state.mn.us/images/0/03/Community_assistance_package.pdf

1V. Conclusion

The Friends of Bass Lake has been actively advocating for the public waters of Bass Lake since 2008. We have been raising the alarm about water level, taking water samples, attending hundreds of hours of conferences, collecting garbage, conducting tours, and pulling great piles of Buckthorn. It is our desire to partner with the city to realize the vision of a restored Bass Lake. Unfortunately efforts by the city have been half-measured. The city vegetation management plan seems to have halted after a troubling critique of the methodology in a report by Great River Greening. The long awaited application for dredging has been shelved. Engineering practices are being advanced without context to overall stormwater goals. Arguments are being made and endorsed by consultants that are environmentally unsupportable such as “Bass Lake is pretty much the way it always was,” or “invasive vegetation is an aesthetic nuisance to be tolerated”. These sorts of arguments are disingenuous and dismissive to true partnership. It is past due for the city to live up to the language drafted by the 2010 City Council with support from the U of M Thompson Center for Environmental Management,

“SLP will be a model of environmental stewardship by providing residents and future generations with educational tools and sustainable practices to foster a community of ecologically conscious and engaged citizens.”

Sincerely,
Scott Carpenter, President

Board Members,
Diane Garetz, Susan Sackrison, Don Weirens, Sunai Cormier, John Snyder, Frank Steck, Mark Berg, Nancy Rose

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