

MEMORANDUM

To: MCWD Board of Managers

From: Anna Brown, Planner & Project Manager

Date: March 14, 2016

Re: March 17 Planning and Policy Committee Meeting: Six Mile Planning

Purpose:

At the March 17th, 2016 Planning and Policy Committee (PPC) meeting, staff will provide an update and seek feedback on several elements of the Six Mile Plan (Plan) development process, including a draft goal framework and a forthcoming request for proposals (RFP) for consultant services.

Background:

The Plan will be the first focal geography plan since the Board of Managers' adoption of the Balanced Urban Ecology Policy which memorializes the District's commitment to integrating land use and water resources. Planning staff have worked to develop an approach to the Plan that builds on lessons learned through working in the Minnehaha Greenway and draws inspiration from Hennepin County Community Works.

On February 11, 2016, planning staff executed an agreement with the U.S. Army Corps of Engineers (USACE) that would support the development of the Six Mile plan by:

- Identifying project opportunities for both wetlands and streams that may be eligible for federal programs
- Performing the watershed analysis for and providing policy guidance on a Six Mile specific programmatic general permit (PGP)

At the same February 11th Board meeting, the Managers authorized staff to execute a contract with Wenck Associates to provide technical assistance relevant to the USACE project that would also be more broadly applicable to the development of the Plan. That contract has enabled staff to begin working with Wenck to develop materials in advance of the April kick-off. At the March 17, 2016 PCC meeting, staff will present a goal framework that is in development and

seek input from the committee on the remaining scope of services that will need to be fulfilled to complete the subwatershed plan.

March 17th, 2016 PPC Meeting:

Goal Development Framework

Six Mile is a large and complicated system, spanning 27 square miles and containing 17 lakes, hundreds of wetlands, and 12 miles of streams. The District has a good technical understanding of the system, having completed a 2013 Diagnostic Report and being in the process of completing a 3-year comprehensive study of invasive Asian carp. The District continues to advance its understanding of the system as it uses Six Mile to develop and pilot the new ecosystem evaluation program (e-grade).

On March 17th, staff will present a goal framework that is in development for Six Mile and is based on e-grade. The objective is to connect the e-grade results to specific goals, objectives, and management activities. The goal framework will further clarify the scope of the Plan as it will serve as the first step in the layered process that staff have outlined at both the PPC and Board meetings.

Scope of Services

The need for additional consulting services for the development of the Plan was discussed at the February 18th, 2016 PPC meeting. Staff have been working to further outline the scope of the Plan and identify where consultant support may be needed. On March 17th, staff will seek input from the PPC on the Six Mile scope of work to facilitate the drafting of a RFP.

Attachments:

- DRAFT Six Mile Goal Framework

If there are questions in advance of the meeting, please contact: Anna Brown at 952-641-4522 or abrown@minnehahacreek.org.

DRAFT Pierson-Marsh-Wasserman Management Unit Goals, Objectives, and Actions

Plan Goal	Ecosystem Service	Condition	Subwatershed Goal	Objective	Actions	Projects/Programs	Schedule		
Water Quality	Nutrient Cycling	Lakes: Pierson and Marsh meet water quality standards; Wasserman exceeds water quality standards. Describe Six Mile Creek condition	All lakes to score supporting or above (exceptional) for the nutrient cycling ecosystem service	Reduce watershed loading to water resources to achieve a 457 pounds/year load reduction to Lake Wasserman					
				Reduce internal loading in Lake Wasserman by 209 pounds/year					
				Manage carp population	<u>Management Unit-wide:</u>				
				Streams: describe stream nutrient conditions – to be completed by E-Grade	All streams to score supporting or above (exceptional) for the nutrient cycling ecosystem service	Reduce watershed phosphorus loads to maintain water quality P standards			
				Wetlands: describe wetland nutrient condition – to be completed by E-Grade	Each subwatershed to score supporting or above for number nutrient cycling ecosystem service	Protect or improve wetland vegetation diversity	<u>Management Unit-wide:</u>		
			Maintain sufficient wetland and water coverage to manage nitrogen loading from the subwatersheds			<ul style="list-style-type: none"> Restore vegetative diversity in wetlands to protect and improve nutrient uptake Manage soil nutrient concentrations to sustain wetland as a sink or n net effect on nutrient loading Maintain a minimum of X percent of subwatersheds in water or wetland coverage to manage nitrate concentrations 			
				Uplands: describe terrestrial nutrient cycling conditions– to be completed by E-Grade	Each subwatershed to score supporting or above for upland area supporting the nutrient cycling ecosystem service	Reduce watershed TP load	<u>Management Unit-wide:</u>		
		Groundwater: describe groundwater quality condition– to be completed by E-Grade	Groundwater discharge to be of sufficient quality to support water quality goals	Protect groundwater quality	<ul style="list-style-type: none"> Adequate buffers provided on all streams and channels Living cover provided year round on 20% or more of land used for agricultural production Minimize fertilizer application on farm land based on soil testing No increase in annual TP loading resulting from new development 				
					<ul style="list-style-type: none"> Prevent groundwater accumulation of chloride by minimizing road salt use and infiltration 				
Water Quantity	Hydrology	Streams: describe stream hydrologic conditions –	Streams to support healthy biological communities as	Reduce peak flows to support biological communities	<u>Management Unit-wide:</u>				

Plan Goal	Ecosystem Service	Condition	Subwatershed Goal	Objective	Actions	Projects/Programs	Schedule
		to be completed by E-Grade	identified by Tiered Aquatic Life Uses by maintaining adequate ecological base flow and minimize peak flow.		<ul style="list-style-type: none"> Minimize creation of new, directly-connected impervious surface Maximize infiltration opportunities to manage rate Maintain sufficient upland cover in pervious/native areas to support sufficient abstraction to reduce peak flows 		
				Improve base flows to support biological communities	<u>Management Unit-wide:</u> <ul style="list-style-type: none"> Maximize infiltration opportunities in near-stream areas Manage rate to support ecological base flow Maintain sufficient upland cover in pervious/native areas to support sufficient infiltration to maintain ecological base flows 		
		Lakes: describe lake hydrologic conditions – to be completed by E-Grade	Manage lake elevation changes to support healthy shoreline systems				
		Wetlands: describe wetland hydrologic condition – to be completed by E-Grade					
		Uplands: describe terrestrial hydrologic conditions– to be completed by E-Grade					
		Groundwater: describe groundwater hydrologic condition– to be completed by E-Grade					
Ecological Integrity	Biodiversity and Habitat Diversity	Lakes: describe lake fish and vegetation diversity– to be completed by E-Grade	Lake fish and vegetation communities to score supporting or higher for the biodiversity and habitat ecosystem services	Manage lake submersed aquatic vegetation to improve native diversity	<u>Pierson, Marsh, and Wasserman:</u> <ul style="list-style-type: none"> Control curly-leaf pondweed and Eurasian water milfoil 		
		Streams: describe stream fish and macroinvertebrate diversity– to be completed by E-Grade	Stream fish and macroinvertebrate communities to score supporting or higher for the biodiversity and habitat ecosystem services				
		Wetlands: describe wetland diversity– to be completed by E-Grade	Each subwatershed maintain a sufficient number of wetlands scoring supporting or higher to support the biodiversity and habitat diversity ecosystem services				

Plan Goal	Ecosystem Service	Condition	Subwatershed Goal	Objective	Actions	Projects/Programs	Schedule
		Uplands: describe upland diversity– to be completed by E-Grade	Upland habitat in each subwatershed score supporting or better for habitat diversity and biodiversity		Protect Key Conservation Areas		
	Habitat Diversity	Lakes: describe lake fish and vegetation habitat– to be completed by E-Grade					
		Streams: describe stream fish and macroinvertebrate habitat– to be completed by E-Grade					
		Wetlands: describe wetland habitat conditions– to be completed by E-Grade					
		Uplands: describe upland habitat conditions– to be completed by E-Grade					
Healthy Communities	Recreation	Lakes and Streams	Maintain high water quality to support recreation water contact in all lakes and streams	Achieve state water quality standards or better water quality in lakes and streams			
		Uplands	Maintain local habitat to support regional game populations to support recreational hunting (waterfowl, pheasants, deer)				
		Lakes and Streams	Maintain appropriate fish communities in lakes and streams to support recreational fishing opportunities				
	Water Supply	Groundwater	Groundwater to be of sufficient quantity and quality to support regional water supply and the groundwater supporting ecosystem service				
	Flood Control	Hydrology	Minimize flooding to protect property values and transportation needs				