

Flooding & Climate Resilience -Category

<u>Impact of climate change on hydrology, water levels, and flood risk – High Priority</u>			
Issue Statement: Extreme fluctuations in precipitation amounts and intensities increase flood risk and prolonged drought cycles that contribute to significant changes to water level and stream flow and may negatively impact <u>the natural and built environment, (e.g. ecology, water quality, public health and safety, economy, and recreation)</u>			
Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	Notes/Timeframe/ Discussion Items
<p>Watershed residents <u>residents, businesses, and and critical</u> infrastructure are protected from flood damages <u>and water fluctuations</u></p>	<p>Identification of areas, populations, and resources most vulnerable to <u>flooding and hydrologic</u> risk resulting from <u>existing and future future</u> climate trends</p>	<ul style="list-style-type: none"> - Perform a risk analysis <u>and prioritization</u> considering vulnerable populations, <u>critical infrastructure, and priority resources</u> - Maintain/update watershed-wide hydrologic and hydraulic model - Encourage/assist cities or partners with <u>development of flood emergency response plans</u> 	<p>Identification of “areas” may include areas outside of BCWMC Trunk system. This is a policy question. Use latest NOAA precipitation forecasts (e.g., Atlas 15) for all modeling efforts and floodplain impact analyses</p>
	<p>Reduction of flood risk for structures and <u>critical</u> infrastructure within the <u>existing</u> floodplain</p>	<ul style="list-style-type: none"> - Implement flood risk reduction projects that increase watershed storage and/or reduce peak flows – CIP - Create a grant or cost-share program to reduce <u>flood risk for habitable structures</u> - Review development and redevelopment projects for compliance with BCWMC floodplain requirements – fee for service - <u>Help with promotion of FEMA’s Flood Insurance Study and Community Rating System among residents and property owners</u> - <u>Review overall BCWMC Flood Control Project for effectiveness; continue inspection and maintenance program</u> - <u>Maintain H&H model</u> 	<p>Potential grant or cost-share program could apply outside of BCWMC trunk system.</p> <p><u>Consider replicating NMCWD climate vulnerability and assessment work</u></p>

VERSION 5/1/24

Includes changes (tracked) from 5/1/24 PSC meeting.

<p>Priority Waterbodies are resilient to changes in water levels and climate such that their beneficial functions are maintained or enhanced</p>	<p>Evaluation of the impacts of climate trends on hydrology, ecology, and recreation of priority streams and lakes.</p>	<ul style="list-style-type: none"> - Monitor water quality of priority waterbodies - Maintain/update watershed-wide hydrologic and hydraulic model - Develop climate resilience study/plan that evaluates potential impacts to priority waterbodies - Work with Met Council or other agencies to map groundwatersheds and evaluate groundwater-surface water interactions – new activity (\$50,000 possible estimate) 	
	<p>All BCWMC projects and programs incorporate climate mitigation and adaptation functions whenever possible; climate resiliency improvements are incorporated into the majority of CIP projects.</p>	<ul style="list-style-type: none"> - Develop climate resilience study/plan that evaluates potential impacts to priority waterbodies - Continue to implement APM/AIS rapid response plan - Update APM/AIS rapid response plan (if needed based on findings of above study/plan) - Implement CIP projects to protect or restore ecological functions of priority waters and tributary watersheds - CIP - Evaluate CIP projects relative to climate trends before implementation. - CIP 	
	<p>Increased use of climate-resilient practices among public and private landowners</p>	<ul style="list-style-type: none"> - Encourage and support public and private landowners to maintain, preserve or restore open space and native habitats to improve climate resiliency (\$50K in 2024 for current education programs) 	

Bassett Creek Valley flood risk reduction and stormwater management opportunities – High Priority			
Issue Statement: Current conditions in the Bassett Creek Valley present significant challenges to sustainable development and resilient, healthy ecological and social communities due to floodplain extents, environmental hazards, and limited space for stormwater management.			
Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	Notes/Timeframe/Discussion Items
The Bassett Creek Valley supports healthy ecological and social communities with reduced flood risk, improved water quality, and neighborhood access to the creek corridor.	Evaluation and sequencing of multi-beneficial projects within the Bassett Creek Valley to reduce flood risk and improve water quality.	<ul style="list-style-type: none"> - Assist multi-jurisdictional partners with evaluating and prioritizing multi-benefit project opportunities within the Bassett Creek Valley - Implement CIP project(s) to increase storage, reduce peak flow, and/or improve water quality in the Bassett Creek Valley while providing multiple benefits - CIP 	

Groundwater quantity – Low Priority			
Issue Statement: Groundwater levels may be negatively impacted by overuse, loss of recharge, or extreme changes in precipitation.			
Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	Notes/Timeframe/Discussion Items
Groundwater levels support drinking water needs and do not negatively impact groundwater-sensitive resources	Prevent negative impacts to groundwater quantity from proposed projects reviewed by the BCWMC.	<ul style="list-style-type: none"> - Review development and redevelopment projects for compliance with BCWMC requirements – fee for service - Review all MDNR groundwater appropriation permit applications in the BCWMC - \$3,000 - 	
	Prevent negative impacts to groundwater quantity from BCWMC projects.	<ul style="list-style-type: none"> - CIP projects are evaluated relative to groundwater quantity impacts before implementation. - CIP 	
	Increase the use of groundwater conservation practices among watershed residents	<ul style="list-style-type: none"> - Encourage and support public and private landowners to pursue conservation practices (\$50K in 2024 for current education programs) - Support cities in the implementation of their water conservation grant or cost-share programs 	

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