



DNR Priority Concerns – Lower MN River West 1W1P

Garry Bennett | Area Hydrologist

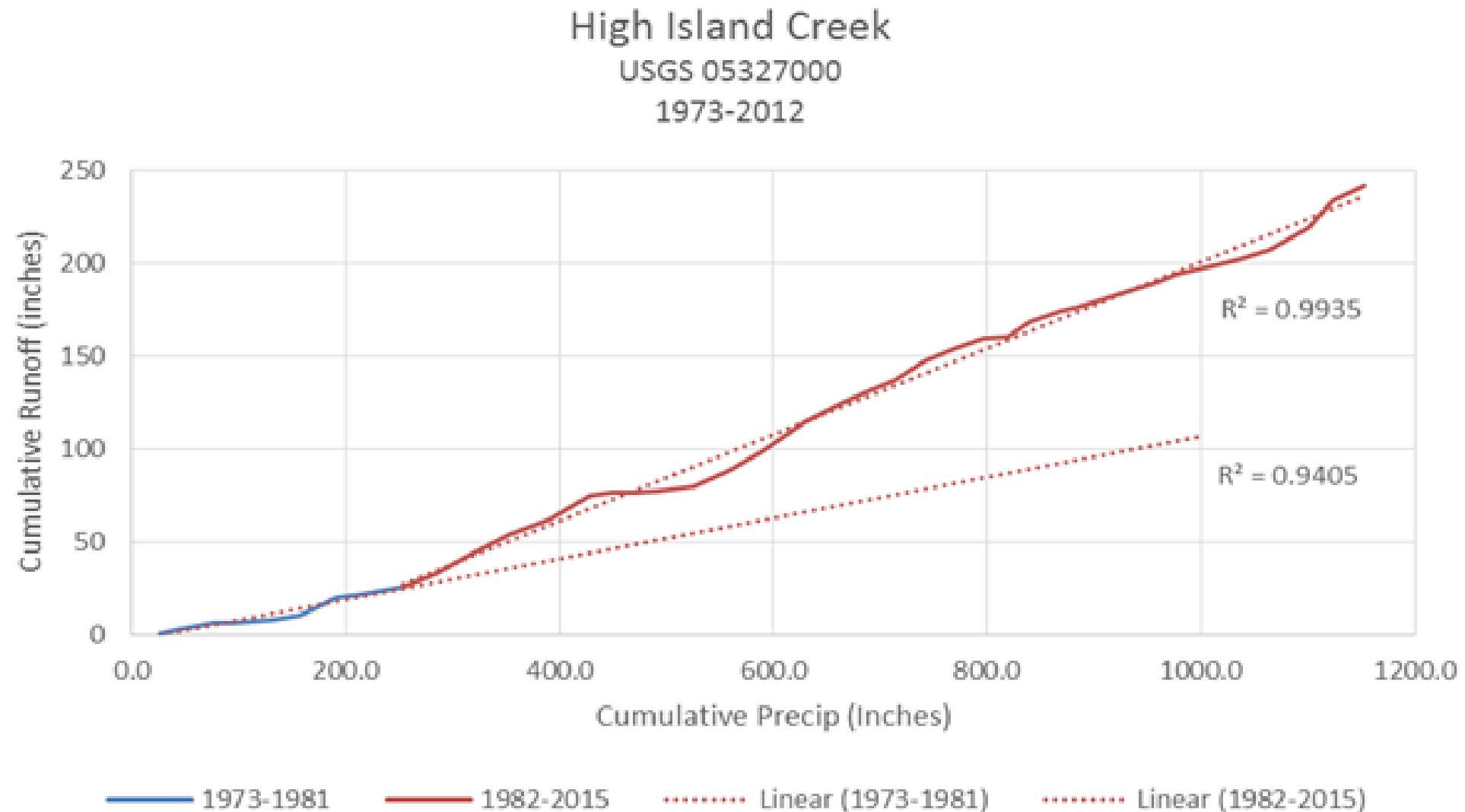
Topics

High-Level Issue	Priority Resource Concern
Hydrologic Conditions	Addressing Hydrologic Change
	Flood Damage Reduction
Clean Water	Water Quality
	Erosion & Sedimentation
	Shoreland & Riparian Zones
Sustainable Water Supply	Groundwater Supply
	Surface Water Supply
Outdoor Recreation & Natural Resources	Habitat
	Biodiversity
	Protect Existing Natural Areas
	Outdoor Recreation

❖ Addressing Hydrologic Change

- “Too much water, too fast”
- Storage
- Infiltration
- Multipurpose drainage management

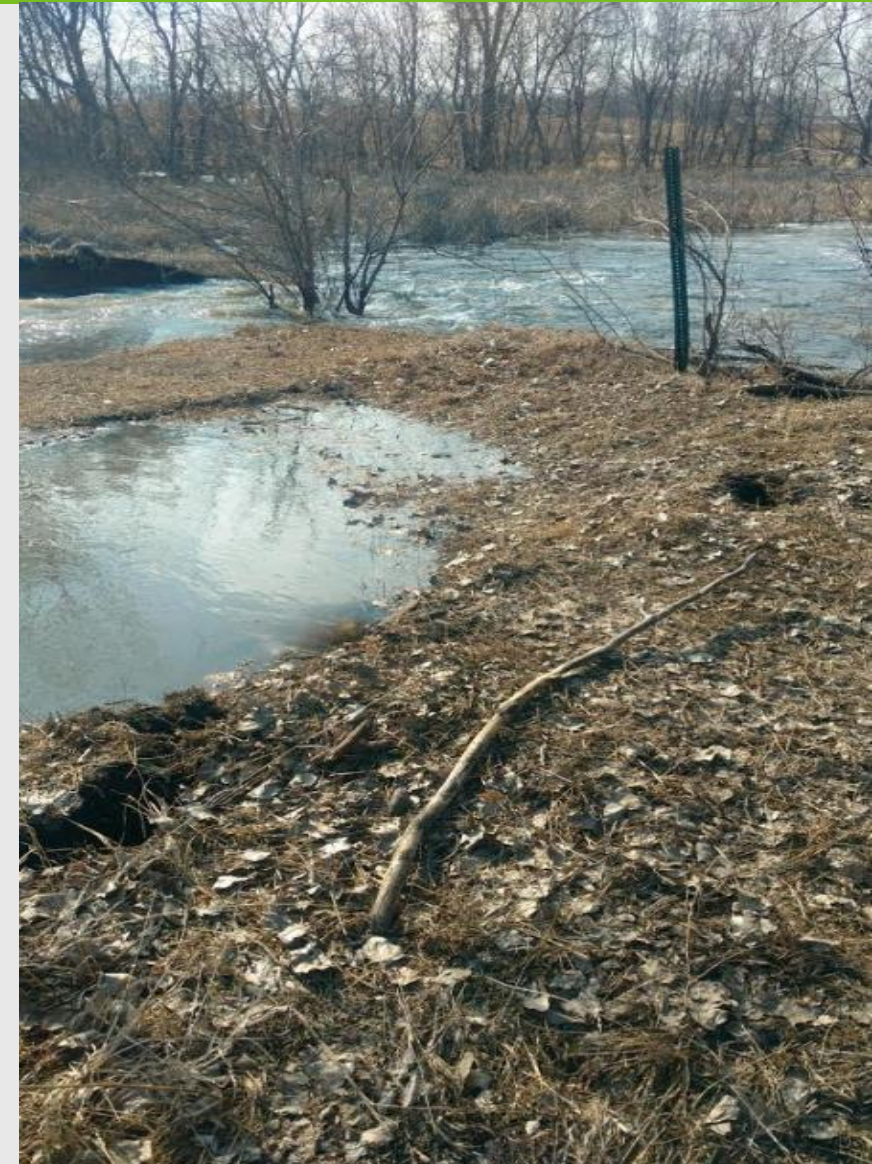
Hydrologic Conditions



❖ Flood Damage Reduction

- Bridge and Culvert Design
- Dams
- Public and Private Drainage

Hydrologic Conditions



❖ Water Quality

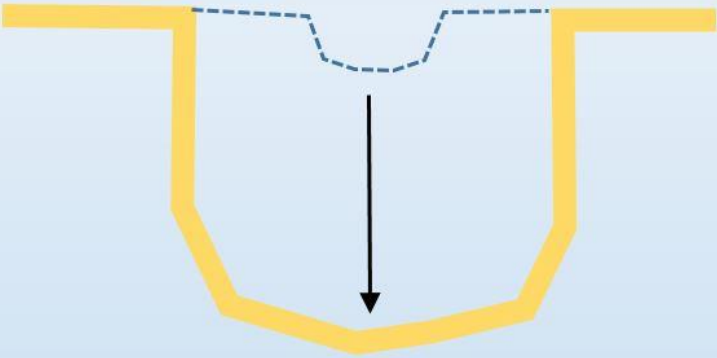
- Healthy Watersheds
- Targeting BMPs for Maximum Benefit
- Reducing Phosphorus

❖ Erosion & Sedimentation

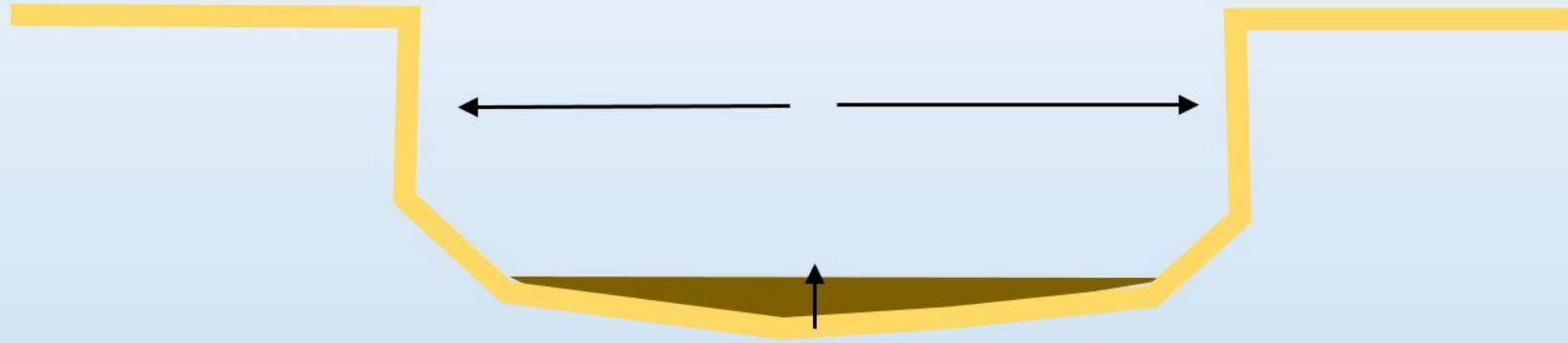
- Unstable Streams
- Damages
- DNR Watershed Characterization Report

<https://wrl.mnpals.net/islandora/object/WRLrepository%3A2620>

Beginning Phases of Channel Evolution



Phase I
Downcutting/Degrading



Phase II
Widening/Aggrading

Clean Water



❖ Shoreland & Riparian Zones

- Preserving or Restoring Shoreline Buffers
- Stream and Floodplain Restoration
- Unstable Bluffs
- Zoning

Lake Washington, Meeker County



Before



After

Clean Water



❖ Groundwater (and Surface Water) Supply

- Aquifer Recharge
- Aquifer Monitoring
- Well Interference and C.A.M.P.

Outdoor Recreation & Natural Resources

❖ Habitat

- Shoreline Buffers
- Instream Barriers

Outdoor Recreation & Natural Resources



Outdoor Recreation & Natural Resources

❖ Biodiversity

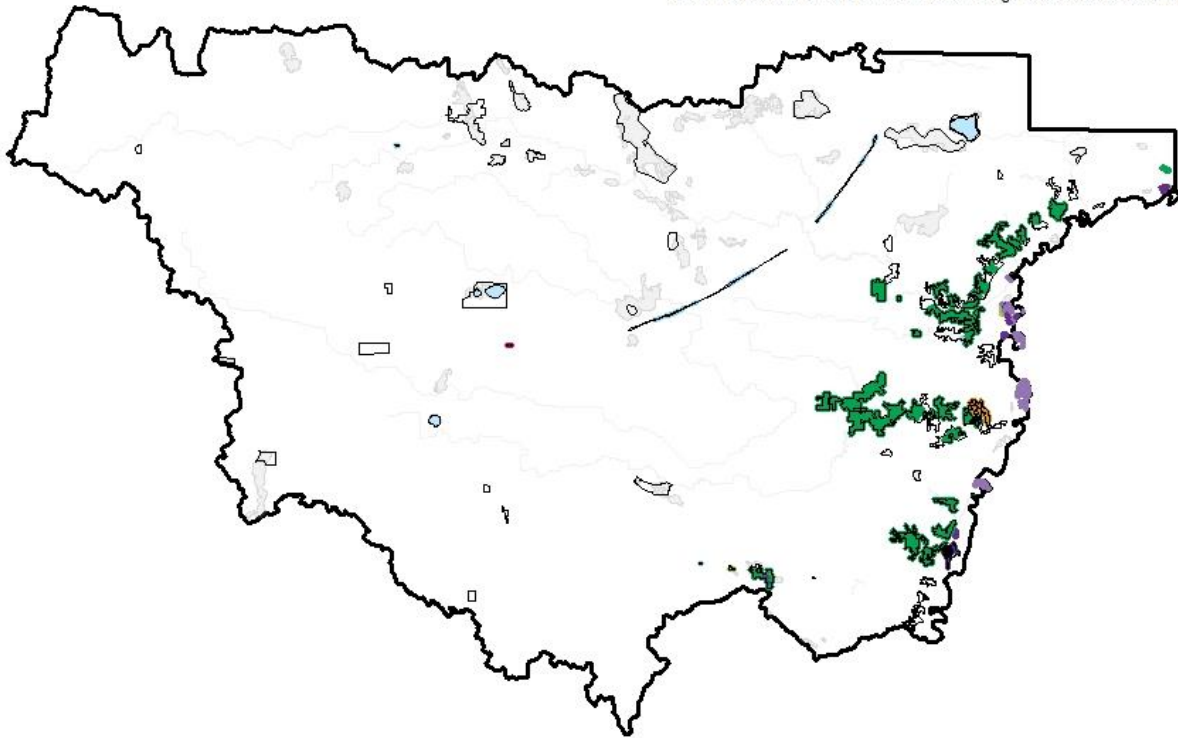
- Protecting Rare Features
- Preserving Native Plant Communities
- Datasets and Shapefiles Available for download at Minnesota Geospatial Commons (www.gisdata.mn.gov)

Outdoor Recreation & Natural Resources

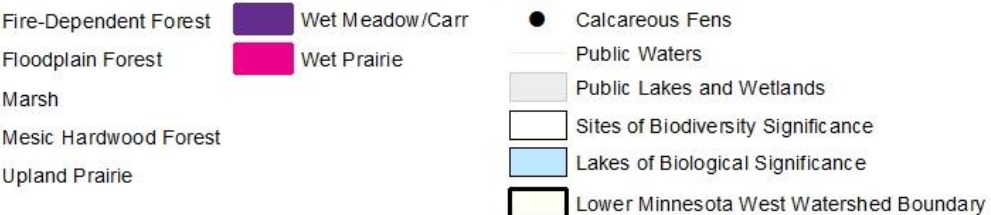
- ❖ Protect Existing Natural Areas
 - Increase Carbon Storage
 - Maintain Ecosystem Balance
 - Climate Change Resiliency
 - Select BMPs to Protect Natural Areas

Outdoor Recreation & Natural Resources

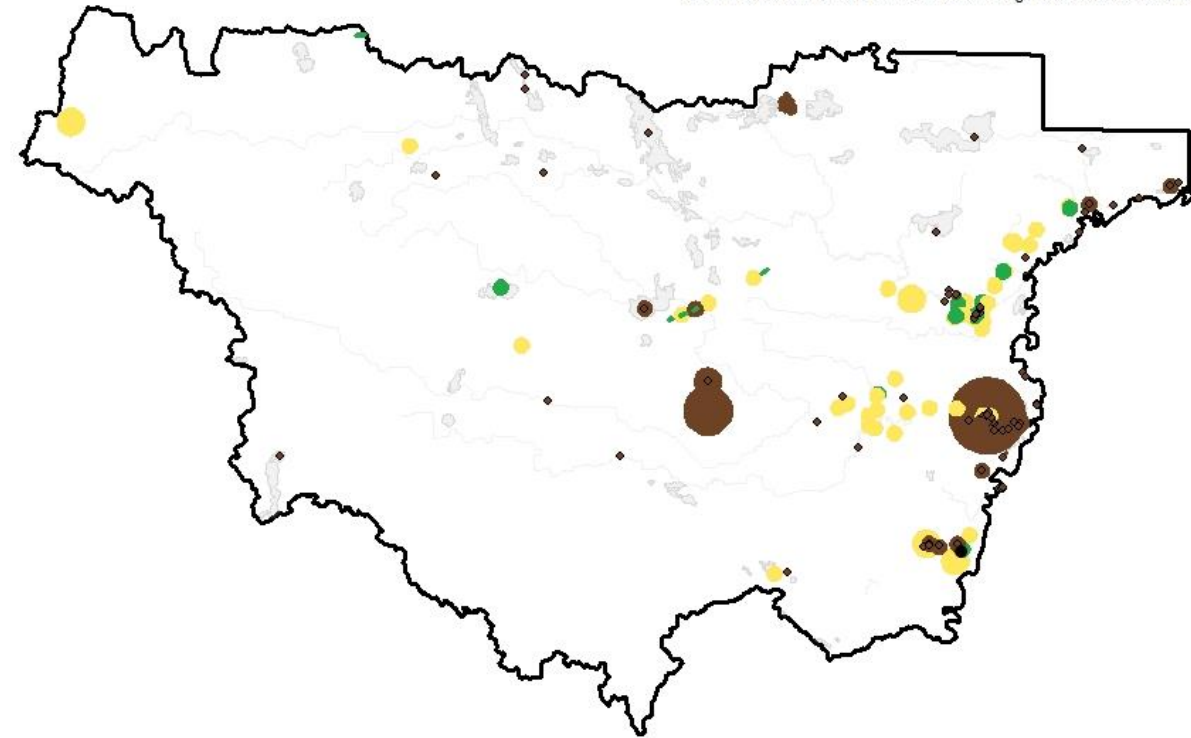
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Mapped Native Plant Community Systems in the Lower Minnesota-West Watershed



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Mapped Rare Plants, Animals, and Native Plant Community Systems in the Lower Minnesota-West Watershed



Outdoor Recreation & Natural Resources

❖ Outdoor Recreation

- Key to Resource Conservation
- Providing Outdoor Recreation Opportunities
- Land Acquisition

Thank You!

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