

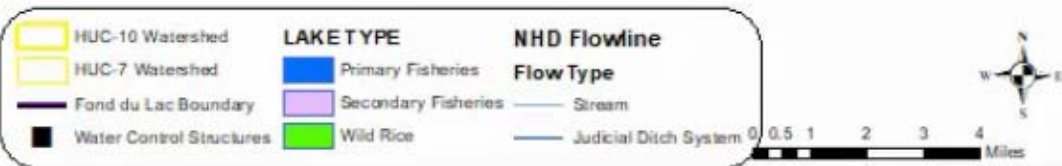
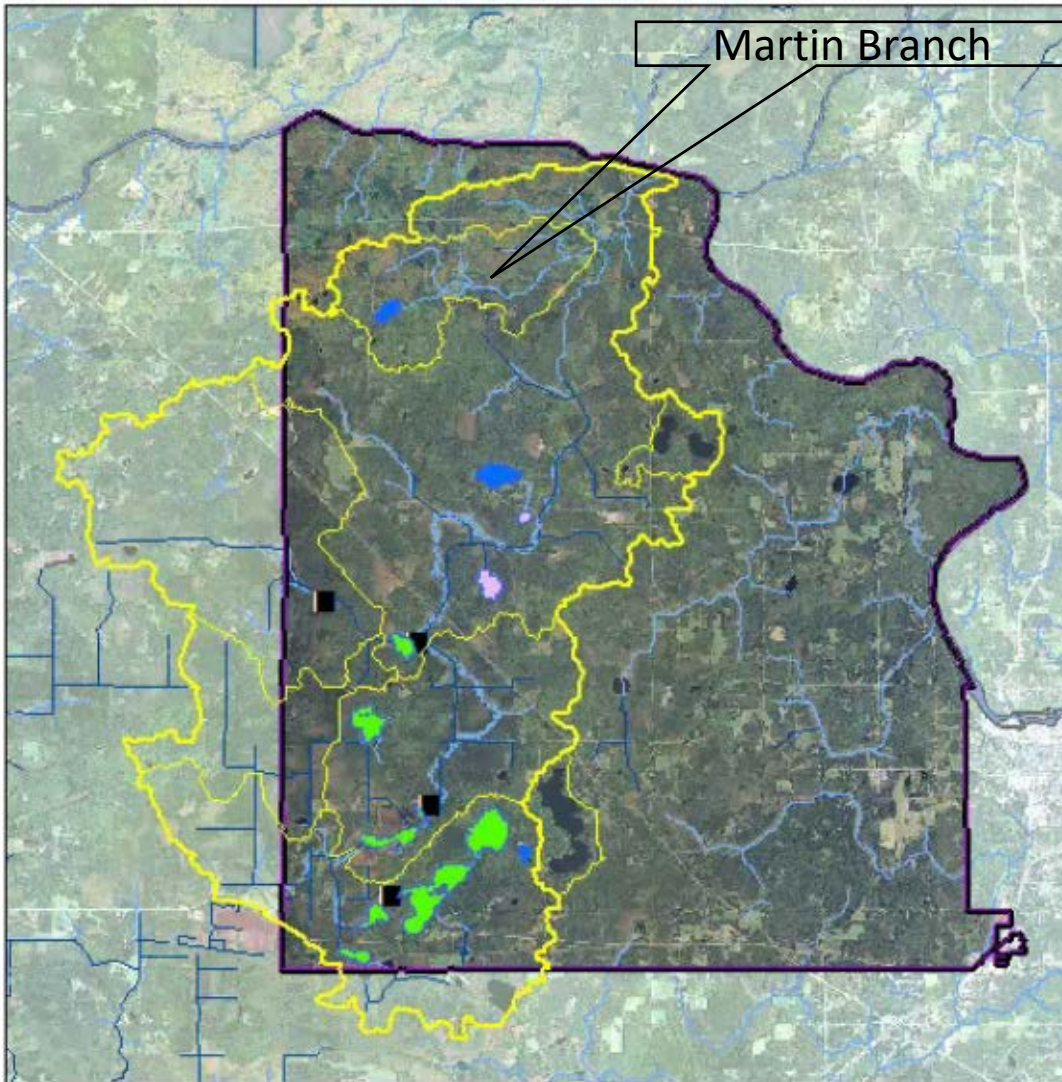
Fond du Lac Draft Goal Numbers

Fond du Lac Reservation

- Fond du Lac has approved water quality standards that are different from the state's
 - More stringent mercury standard in water to be protective of higher fish consumption levels by Band members
 - New aquatic life use conductivity standard; numeric nutrient criteria for lakes
 - Narrative wetland standards
 - Antidegradation focus to protect high quality waters
- FDL Resource Management has a tribal Nonpoint Source Pollution Program
 - Informs the measurable goals

Stoney Brook Watershed

Martin Branch



Stoney Brook (HUC 10 with HUC 7 subwatersheds)

- 101 square miles
- Watershed boundaries not always correct. The HUC 10 boundary puts the Twin Lakes in the Stoney Brook watershed. The HUC 7 boundary puts Big lake in the Stoney Brook watershed. All these lakes are actually in the Simian Creek watershed.
- Primarily forested and wetlands
- Bisected by pipeline corridor
- Lakes by designated use
 - 3 primary fisheries
 - 3 secondary fisheries
 - 6 wild rice
 - Most are outstanding Reservation-resource waters (Tier 3 antidegradation)
- Streams
 - Heavily ditched watershed, wild rice lake levels controlled by dams.
 - Mystery snail near crossing with Highway 2
 - Martin Branch has self-sustaining brook trout population near headwaters; impacted by a sinking bridge

Stoney Brook Watershed



Mercury

- Joe Martin Lake, Sofie Lake, Lost Lake and Stoney Brook are impaired for mercury in the water column for the Aquatic Life (Subsistence Fishing/Netting) designated use.
- Bang Lake, Deadfish Lake, Rice Portage Lake, Jaskari Lake, Mud Lake, Spring Lake, Spruce Lake, Lac Lake and Perch Lake (North Basin) are impaired for mercury in fish tissue based on EPA Human Health Criterion.
- Perch Lake (South Basin) is the only lake not impaired for mercury.

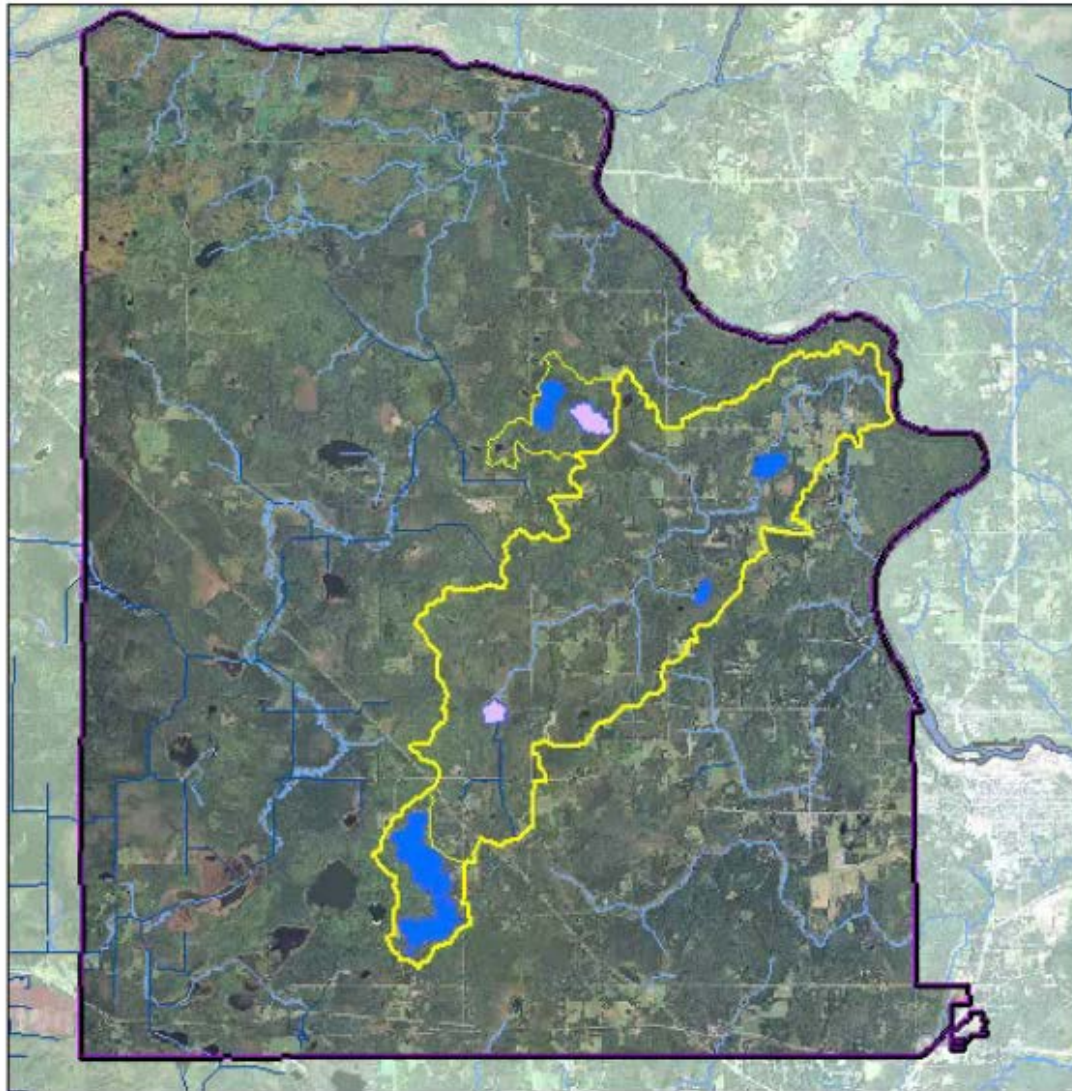
Hydrology

- We have a list of wetlands that are prioritized for restoration.
- FDL working with USGS to complete a watershed model and Nine-Element Watershed Plan for Stoney Brook.
 - The model will inform wild rice lake level management and prioritize locations where the original channel could be restored; improved connectivity with the floodplain.

Stoney Brook measurable goals

- Remove barriers to fish passage at Martin Branch (Stevens Rd). Restore 1000 ft of stream channel and 11 acres of impacted cedar swamp
 - Create design plans for restoration project
 - Partner with St. Louis County (landowner)
- Restore two wetlands on the top of the wetland restoration priority list
- Improve hydrology in ditches (refer to Stoney Brook model):
 - Restore two obsolete ditch laterals to original stream channel
 - Dredge 62 ft of ditch channel downstream of Deadfish Lake to reduce wild rice loss due to backwater effects
- Invasive Species:
 - Conduct a 5-acre black ash understory planting in wild rice headwaters (also addresses potential future hydrologic impacts)
 - Conduct intensive Chinese mystery snail surveys and management on 2,000 ft of Stoney Brook near Hwy 2

Simian Creek Watershed



Simian Creek (HUC 10 with HUC 7 subwatersheds)

- 22 square miles
- Forested and wetlands, rural residential, dense development around Big Lake, pastures/hayfields.
- Pipeline corridor between Big Lake and Cedar Lake
- Lakes by designated use
 - 4 primary fisheries
 - Mystery snail in West Twin Lake and Simian Lake
 - 2 secondary fisheries
 - Cedar Lake has diminished wild rice population.
- Streams
 - Ditched in headwaters
 - Simian Lake in line with a stream channel; a flowage lake.
 - Impacted by large beaver dams, Chinese mystery snail

Simian Creek Watershed



Mercury

- Simian Creek, Big Lake, Pat Martin Lake and Simian Lake are impaired for mercury in the water column for the Aquatic Life (Subsistence Fishing/Netting) designated use.
- Simian Creek and East Twin Lake are impaired for mercury in the water column for the Wildlife Designated Use
- West Twin Lake and Pat Martin Lake are impaired for mercury in fish tissue based on EPA Human Health Criterion.

Hydrology

- Watershed model created by Army Corps to characterize Cedar Lake/Simian Creek hydrology, as Cedar Lake has been too deep to sustain wild rice for many decades.
 - Model identified channel clearing, beaver dam removal as management options to lower lake level, increase rice habitat.

Simian Creek Watershed

Development Impacts

- Big Lake stressors include shoreline development and septic system noncompliance. Septic system solutions are likely outside the scope of 1W1P. Increasing chloride trend in Big Lake, potentially due to water softeners, deicing chemicals.
- Chloride levels are low elsewhere, but is still a pollutant of concern.

Simian Creek measurable goals

- Restore 3500 ft of stream channel downstream of Cedar Lake by removing a large beaver dam and clearing the channel at lake outlet.
- Conduct 2 training events at Big Lake to teach homeowners about natural shorelines.
- Train 4 FDL facilities staff to be Smart Salt Certified.
- Conduct 2 rounds of mystery snail removal at West Twin Lake and 2 rounds at Simian Lake. Do 2 mailings to lakeshore landowners about this issue. Remove Chinese mystery snail from 1000 ft of Simian Creek
- Conduct buckthorn and honeysuckle removal on 5 acres near Simian Lake.