

# Summary

Monitoring and Assessment

## Big Fork River Watershed



The Big Fork River Watershed is split between northern Minnesota's Itasca and Koochiching counties. It is one of 11 watersheds in the Rainy Basin and drains more than 1.3 million acres. Its many lakes, wetlands and forests support forestry and tourism industries. The major river, the Big Fork, starts at Dora Lake and winds its way north into the Rainy River. The river is an outstanding recreational resource offering fishing and canoeing opportunities for people seeking a true wilderness experience.

Local citizens, collaborating with Soil and Water Conservation Districts of Itasca and Koochiching Counties, Itasca Community College, Itasca Water Legacy Partnership, Big Fork River Board and the state's Department of Natural Resources and Pollution Control Agency are working to improve and protect its waters.

### Key issues

Limited land uses for industry, housing, and roads have led to high water quality in the Big Fork system, however challenges remain in maintaining this high quality water.

The identified impairments found in lakes and streams are:

- High levels of mercury in fish tissue which limit fish consumption;
- Nutrient impairments;
- Low dissolved oxygen in streams, which may be due to natural causes; and,
- Biological impairments for fish and aquatic macroinvertebrates.

### Highlights of report

- The Big Fork River and 12 lakes were found to have fish with measurable levels of mercury.
- Fish tested for PCBs (polychlorinated biphenyls) and/or PFOS (perfluorooctane sulfonate) had concentrations below the impairment threshold or detection limit.
- Eleven large streams or stream segments were assessed for aquatic recreation; all had low levels of bacteria and were fully supporting aquatic recreation.
- Low oxygen levels in the Upper Bowstring River and Gale Brook/Rive River sub-watersheds likely due to natural causes or conditions.
- Non-support for invertebrates in the Middle Big Fork sub-watershed.
- Non-support for fish and invertebrates in the Bear River sub-watershed.
- Dinner Creek sub-watershed is in need of further study to clarify the cold water or warm water classification.
- Based on monitoring the amount and types of fish and invertebrates found in the streams of the watershed, 33 of the 41 streams assessed supported aquatic life, six did not support the aquatic life, and two streams did not have enough information to make an assessment.

