The Salmon River Headwaters
Ours to discover and protect

Friends of the Salmon River (FSR) is a community group dedicated to the protection of the Salmon River watershed, recognizing its natural beauty and pristine features.
One of our objectives is to enhance land and water protection, which is so crucial for the river's headwaters.

We **share a commitment to safeguarding the ecological integrity of our natural environment and its social benefits** with several lake associations including Kennebec Lake Association, Big Clear Lake Association, Horseshoe and Crotch Lakes Property Owners' Association.

About the Salmon River Watershed:

- **The headwaters begins north of Cloyne in Lennox and Addington County and empties into the Bay of Quinte at Shannonville, east of Belleville, in Hastings County.**
- **Length: 148 km**
- **Watershed area: 921 square km**

About the Salmon River Headwaters:

- **Pristine, natural state:** much of the headwaters (especially north of Highway 7) consists of wetlands and forested areas.
- **Protected:** Much of the Salmon River headwaters is Crown land, which benefits from some level of protection (from Puzzle Lake Provincial Park south of Arden, to multiple conservation reserves, both north and south of highway 7).
- Includes **Areas of Natural and Scientific Interest (ANSIs)** — provincially designated natural heritage features: Hungry Lake Barrens, Harlowe Bog and Puzzle Lake.

Photo: Noreen Dertinger

Importance of headwaters:

- Headwaters act as the "**kidneys**" of watersheds
- Headwaters are the source streams and catchments at the highest points of a watershed. They are **vital to Ontario's ecological and economic survival** because they filter drinking water, mitigate downstream flooding, and maintain the biodiversity of the entire Great Lakes basin.
- **The Salmon River benefits** from flowing through vast natural areas, especially in its northern portions. Maintaining and enhancing the protection of this region is crucial for the overall health of the watershed and all its inhabitants.

Some key benefits of headwaters:

1. Water Quality and Filtration

- Porous natural landscapes act as vast, 400-million-year-old natural aquifers. They filter rain and snowmelt, providing clean, safe drinking water.
- Pollution Control: By trapping sediment, nutrients, and organic debris, headwaters prevent these pollutants from contaminating downstream lakes and rivers.

2. Flood Control and Flow Regulation

- **Mitigating Disasters:** Headwater wetlands, forests, and small streams absorb heavy rainfall and snowmelt. This natural sponge slows down runoff, preventing flash floods and soil erosion.
- **Maintaining Base Flows**: By slowly releasing stored water, headwaters can keep rivers and streams flowing year-round.

Photo: Gray Merriam

3. Biodiversity and Habitat Preservation

- **Critical Sanctuaries:** They serve as breeding, feeding, and sheltering grounds for more aquatic and terrestrial species than any other habitat type.
- **Coldwater Ecosystems:** Shade from streamside forests keeps headwaters cool, creating the exact environment required by sensitive species

4. Community Benefits

- **Nurturing Ecosystems:** Headwaters supply the bulk of the organic material and nutrients that sustain the entire food chain of larger downstream rivers and major bodies of water, including Lake Ontario.
- **Community and Economic Benefits**: Clean, abundant water from the headwaters directly supports agriculture and communities with fresh water supply as well as diverse recreational activities such as boating, fishing, swimming, birdwatching, and hiking.

Threats to Watersheds:

- **Headwaters are extremely sensitive to degradation from urbanization, agricultural runoff and climate change.**
- Urbanization replaces natural ground cover with impermeable surfaces, accelerating polluted stormwater runoff. Agricultural practices introduce excess nutrients and pesticides, which cause harmful algal blooms, while climate change alters precipitation patterns and worsens floods and droughts.
- **Climate Change:** Warmer temperatures, severe storms, and reduced ice cover disrupt delicate ecosystems, making the environment more vulnerable to invasive species and threatening biodiversity

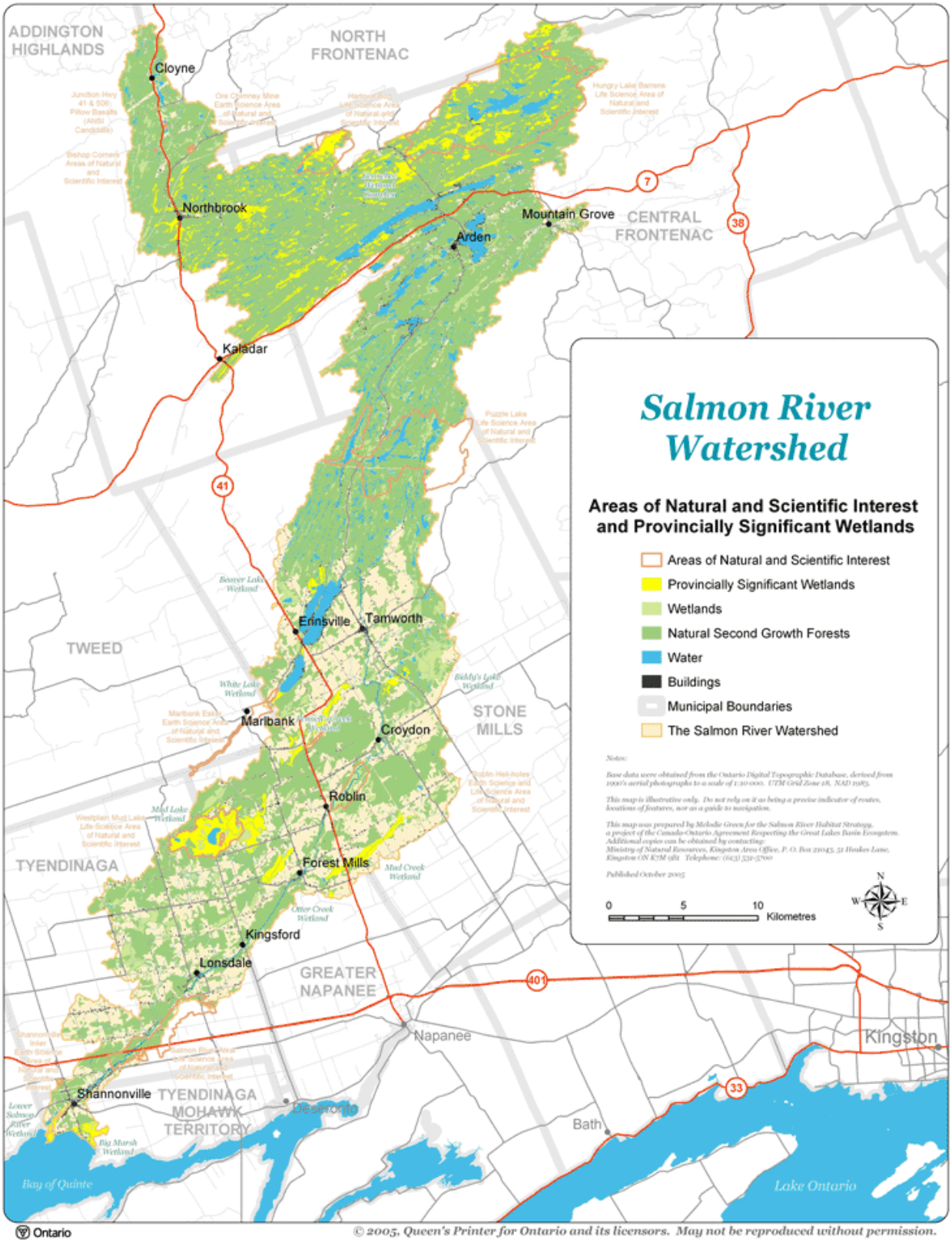
Photo: Gray Merriam

Protecting the Salmon River headwaters:

- **Take some concrete actions:**
  - Plant buffer trees and shrubs along shorelines
  - Grow native plant gardens on your property and on community spaces
  - Combat invasive species
  - Monitor and ensure water quality
  - Don't use harsh chemicals and pesticides that flow into the groundwater
  - Dispose of waste properly
- **Advocate for maintaining and enlarging existing protected areas** (provincial parks, conservation reserves, land trusts, etc.)
- **Get involved in Citizen Science**
  - EDD Maps for reporting on invasive species https://www.eddmaps.org/
  - Help with invasive species removal with local organizations (Friends of the Salmon River, Quinte Field Naturalists, Quinte Conservation
  - Send nature photos to Friends of the Salmon River
- **To learn more about Crown land,** its various uses and how to locate it, see the Crown Land Use Atlas https://www.ontario.ca/page/crown-land-use-policy-atlas
- **Connect with local groups about land and water protection.**

Resources:

- **Friends of the Salmon River (FSR):** https://www.friendsofsalmonriver.ca/
- **Areas of Natural and Scientific Interest (ANSI):** https://geohub.lio.gov.on.ca/datasets/areas-of-natural-and-scientific-interest-ansi/about
- **Big Clear Lake Association:** https://www.bigclearlake.com/
- **Horseshoe and Crotch Lakes Property Owners' Association:** https://hclpoa.ca/
- **Kennebec Lake Association:** https://kennebeclake.ca/
- **Land Conservancy of KFLA:** https://www.landconservancykfla.org/
- **Nature Conservancy of Canada:** https://natureconservancy.ca/
- **Ontario Nature:** https://ontarionature.org/
- **Quinte Conservation Authority:** https://www.quinteconservation.ca/
- **Quinte Field Naturalists:** https://quintefieldnaturalists.org/
- **Watersheds Canada:** https://watersheds.ca/



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Map 9. Areas of Natural and Scientific Interest and Provincially Significant Wetlands