

Environmental Fact Sheet - A Guide to the NWMO's Environmental Program

How was the Environmental Program Designed?

The NWMO's environmental studies have been co-developed with the community, consultants and experts and their input is integral to the creation of the environmental baselines and change assessments. The studies completed help communities become more informed about local and regional community well-being, as well as environmental conditions and possibilities.

What is the goal of the NWMO Environmental Program work?

The goals of the NWMO's Environmental Program are to establish the current environmental conditions in the remaining potential siting regions and to use this information to assess what potential impacts the NWMO's Deep Geological Repository (DGR) may have on the local environment of the host site.

How does the NWMO accomplish these goals?

These goals are accomplished by collecting environmental data which produces **Baseline Studies** and by assessing potential impacts from the project on the environment through **Change Assessment** studies.

How is the environmental program organized?

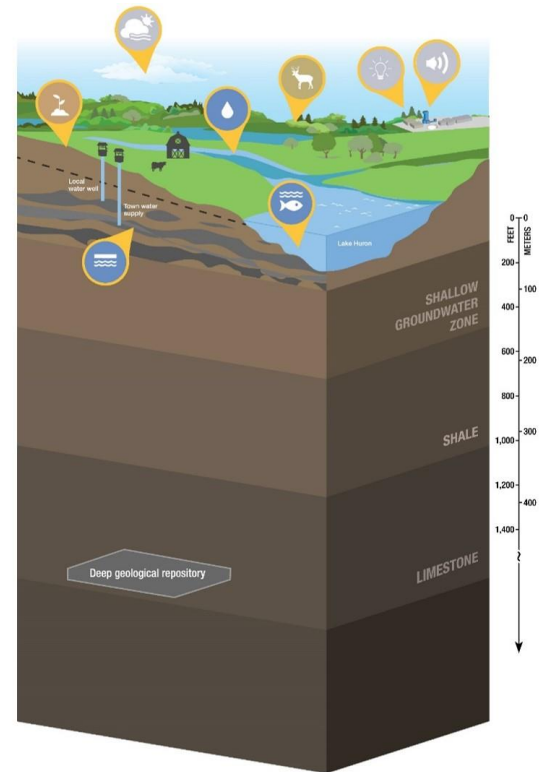
The environmental program is divided into two main areas of study, **Environmental Media** and **Biodiversity**. Environmental media studies are concerned with the chemical and physical aspects of the environment such as the air, water, and soil. Biodiversity studies are concerned with the living species and their habitats, for example fish and fish habitat.

What is a Baseline Study?

Baseline studies are conducted for each component of the environmental program, **Environmental Media** (e.g., air, surface water, soil) and **Biodiversity** (plants, animals, and habitats). These studies involve collecting a large number of samples from the environment over several years and in different seasons to establish the current state of the local environment before any NWMO activity occurs. This data is used to create a conceptual site model, shown on the right.

What is a Change Assessment?

Change Assessments are complimentary to the baseline studies and are conducted in the same two categories, **Environmental Media** and **Biodiversity**. Using the conceptual model produced by the baseline studies, the Change Assessments identify how the NWMO's project might interact with the environment and how such potential interactions could be mitigated. Change Assessments consider each phase of the project lifecycle and do not consider the transportation of used nuclear fuel.



Biophysical Conceptual Site Model.

What are the components of the environment that the NWMO project may interact with?

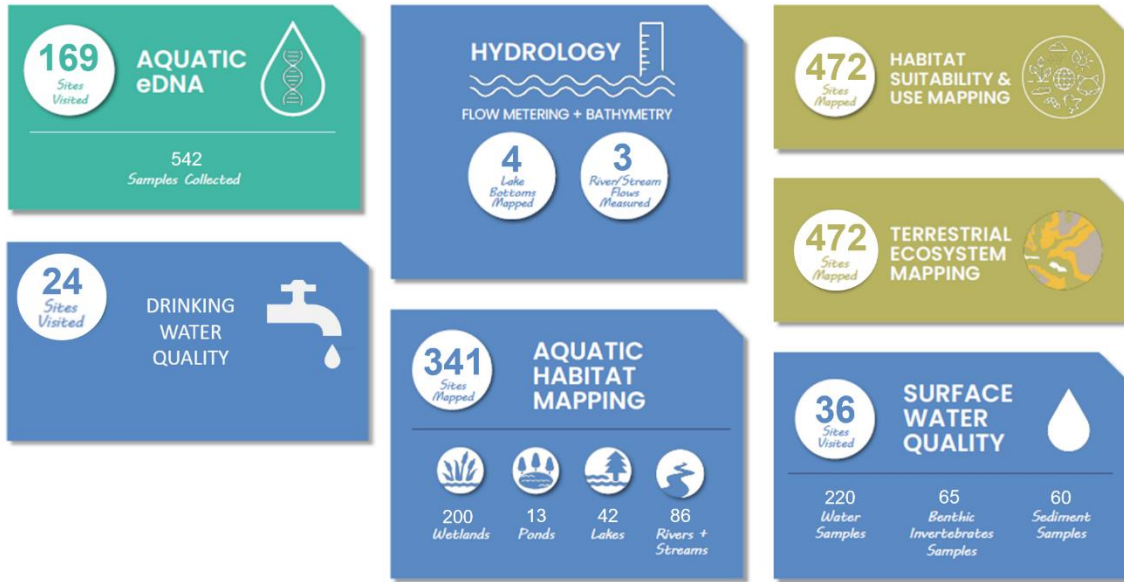
Environmental Media:

- Air
- Tissue Chemistry
- Soil Quality
- Surface Water Quality & Hydrology
- Drinking Water

Biodiversity:

- Species of Interest
- Important Habitat
- Wetlands and Riparian Area

What Sampling Has Been Done So Far?



What is the Change Assessment Process?

1. Identify the project activities for the entire lifecycle of the project.
2. Identify the potential environmental interactions.
3. Identify mitigation measures that could mitigate the interactions.
4. What are the best practices for these mitigation measures?



Example of step 2 in the change assessment process for air.

How can I have my say?

Community and Rights Holder’s feedback is essential to our environmental program and the NWMO will continue to conduct engagement activities throughout our program. Visit us at 12B Clinton St S, Teeswater, or email sbenvironment@nwmo.ca.