

## Environmental Services

*To proceed with confidence that your project meets expectations and regulatory requirements, Native Plant Solutions (NPS) professionals provide pre- and post-project ecological information, field data collection and analysis.*



Assuring the public and regulators that your project will have as small an environmental footprint as possible is important. You may need to demonstrate that the impact of your activities on the environment will be appropriately mitigated for at the conclusion and commissioning of your project. You may also be required to show that best management practices are incorporated into your environmental approach.

NPS brings you peace of mind in knowing you took an environmentally responsible and scientifically defensible approach to development and compensation. **NPS services include:**

### Ecological Surveys, Monitoring and Research

Ecological surveys can be designed to inventory biota in an area, assess habitat types and identify regions of high biodiversity. They can also be structured to collect data on sensitive species or capture more rigorous data on habitat variables that support ecosystem functions in an area.

Ecological surveys provide baseline data prior to landscape and development projects. They help direct activities to minimize adverse environmental effects and ensure proper steps are taken to preserve, mitigate or recreate habitats. They can also monitor a suite of habitat variables and fauna once development has occurred. **NPS services include:**

- ✓ Soil sampling and classification
- ✓ Water and land mapping and inventory
- ✓ Habitat assessments
- ✓ Species surveys, inventories and identification
- ✓ Recommendations on best management practices

### Quality Assurance and Environmental Audits

NPS provides third-party verification and site inspections for clients concerned about the delivery of wetland and upland products and services by suppliers.



### Geographic Information Systems (GIS) Products

NPS draws on Ducks Unlimited Canada's (DUC) extensive experience in digitizing, classifying and managing wetland and upland geo-spatial land products. To date, DUC has established a conservation geo-database, which incorporates digitized wetland and upland components on over 5,600 habitat projects that cover approximately 1.2 million hectares across Canada. Because GIS technology plays such a critical role in DUC's wetland conservation efforts and is an important strategic planning tool, our staff is on the leading edge of this technology.

### Why Native Plant Solutions?

NPS staff have vast experience in a variety of Canadian ecological landscapes across the country. Whether it is terrestrial or aquatic zones in the Arctic, boreal forests or prairies, NPS has designed and conducted research studies, constructed and managed wetlands, and planted native grass uplands in every region of the country.

Our network of contacts in the scientific and technical community allows us to bring the most effective skills set and knowledge base to your project. Through partnerships and collaboration, we present the best information so you can act with confidence.

### Our Expertise

- ✔ NPS staff are specialists in wetland, native upland, aquatic and soil sciences including agronomy, site remediation, landscape design, avian biology and GIS technology.
- ✔ Our expertise is complemented by a broad array of biology, agronomy, research and engineering specialists at DUC, combining scientific knowledge with on-the-ground experience.

*We offer...*

- ✔ Research project design and sampling strategies based on accepted scientific principles
- ✔ Literature reviews
- ✔ Data interpretation, statistical analysis and report writing
- ✔ Geo-spatial mapping and analysis



### Ridgewood South Biological Inventory



**Project proponent:** Qualico® Communities  
**Location:** Winnipeg, Manitoba

**Project description:** Project included an extensive inventory of flora, fauna and habitat in a 325-hectare area being proposed as one of Winnipeg's newest developments. During public consultations, concerns were raised regarding the potential impacts on existing flora and fauna in the area. NPS designed and conducted scientific surveys on:

- Owls
- Breeding Songbirds
- Flowering Plants
- Mammals
- Vegetation and major habitat classes
- Amphibians
- Yellow Rails
- Wetlands
- Waterfowl and Upland Nesting Birds

Findings from the Ridgewood biological inventory were designed to help identify and provide recommendations for those locations where further habitat fragmentation or habitat loss may risk the loss of sensitive species or species of special interest. Recommendations were provided on how to lessen or avoid impacts, through preservation, mitigation or enhancement of existing habitat.

### Sensitive Habitat Inventory & Mapping (SHIM)



**Project proponent:** Lake Winnipeg Foundation Inc.  
**Location:** Lake Winnipeg South Basin, Manitoba

**Project description:** Near-shore and on-shore inventory of 300 kilometres of shoreline in the south basin of Lake Winnipeg. The intent of the study was to provide decision-makers, planners, developers, landowners and government agencies with tools and information required to make sustainable shoreline use decisions.

NPS staff surveyed and summarized information on the current conditions of the foreshore of Lake Winnipeg's south basin. Baseline ecosystem data, including an inventory of foreshore morphology, land use, riparian condition and anthropogenic alterations, were collected to aid in prioritizing critical areas for conservation and/or protection. Fifty individual and unique shoreline segments were identified along the 300 kilometres.

NPS provided scientific expertise in the areas of wetland and upland plant identification, wildlife identification, and general field data collection and processing. Professional services provided to complete this work fell into the following categories: biology, wetland/plant ecology, invertebrate ecology and wildlife ecology. The scope of work included:

- Advisory and consultation services for project planning and study design
- Field surveys of Lake Winnipeg's south basin, including foreshore inventory and mapping, wildlife habitat surveys, and biological on-shore sampling (fish, wildlife, plants, and aquatic invertebrates)
- Data collection, management and summary
- Written report



**NATIVE  
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SOLUTIONS**

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*Native Plant Solutions is a consulting branch of Ducks Unlimited Canada and draws on over 70 years of wetland and native grassland knowledge, research and restoration experience. We use sound science to restore and create sustainable landscapes.*