

GREEN SHOVELS

A collaborative list of shovel ready projects to achieve job creation, economic recovery, and environmental progress.



Green Shovels is a list of shovel-worthy “green” projects developed by an informal coalition of conservation organizations. These Green Shovels projects could be considered by the federal, provincial, and municipal governments as part of job and economic stimulus planning and as ongoing employment and infrastructure work.

Our projects have been proposed to achieve a triple bottom line of economic, environmental, and social benefits.

ECONOMIC BENEFITS AND JOB CREATION



Green Shovels projects would support local contractors, local communities, youth, and young professionals. **These projects have a high leverage rate of at least three to one and are supported by generous financial and in-kind contributions from organizations and partners.**

ENVIRONMENTAL BENEFITS



Green Shovels projects are scalable from small to large. They can deliver major improvements in leading environmental challenges:

- ✓ **Habitat creation & protection**
- ✓ **Reducing invasive species**
- ✓ **Reducing flooding**
- ✓ **Protecting species at risk**

SOCIAL BENEFITS



Green Shovels projects are proposed by organizations who know local communities well and know how to quickly roll out green legacy projects with local buy-in and support. These projects will reconnect people and places.

We are an informal coalition of conservation organizations, including Ducks Unlimited Canada, Federation of Ontario Cottagers' Associations, Invasive Species Centre, Nature Conservancy of Canada, Ontario Federation of Anglers and Hunters, and Ontario Turtle Conservation Centre.

Together we represent millions of Canadians, with members who are cottagers, outdoor recreationists, anglers, and hunters. We are also land managers, with many hectares of land under ownership or management. We came together to offer a list of shovel ready projects which would achieve the government's objectives of job creation and economic recovery, along with important benefits to local communities and the environment.

\$50,000,000+ PROJECT VALUE | 1,000+ JOBS CREATED

We propose a list of 11 projects grouped by two government outcomes:

JOB CREATION

- 1 Employing youth & young professionals
- 2 Supporting municipalities & local communities
- 3 Building rural opportunities & getting small business back to work
- 4 Harnessing technology solutions

SUSTAINABLE INFRASTRUCTURE

- 1 Supporting tourism & recreation
- 2 Re-imagining rivers
- 3 Restoring regional habitats & supporting species at risk
- 4 Protecting infrastructure

Projects will:



Help meet federal, provincial, and global conservation policy benchmarks



Deliver co-benefits for climate change, flooding, critical habitat, and biodiversity



Bring ongoing high leverage value via strong donor bases and committed supporters

This Green Shovels list is designed to start conversations on projects to be considered as part of a government stimulus plan and as ongoing work. They will achieve a triple bottom line of economic, environmental, and social benefits, are proposed by solid organizations with proven track records, and can be implemented quickly and at any time. We would be pleased to discuss these ideas with you.

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IDEA	OUTCOME	GEOGRAPHY	DETAILS	PARTNERS & CONTRIBUTORS
EMPLOYING YOUTH & YOUNG PROFESSIONALS				
Enhance federal and provincial work experience programs with dedicated career training support for conservation interns, workers, and students in sustainable resource management through a Canadian conservation internship program, Ontario summer student program, and Ontario regional conservation internship.	Practical, job-ready experience for students, recent graduates, young adults, and Indigenous youth, effective low-cost program delivery by employers, and multiple conservation/environmental benefits.	Canada-wide, Ontario-wide, regional: Norfolk County, Peterborough/ Napanee, Kingston/Ottawa Valley/ Frontenac Arch, Eastern Georgian Bay Coast/Happy Valley Forest, Bruce Peninsula/Maitland River Valley	Investment Opportunity: \$21 million via NOHF and CSJ employment programs Indigenous Participation: Yes Job Creation Estimate: 70 direct, 100 indirect	Nature Conservancy of Canada, Ontario Federation of Anglers and Hunters, Federation of Ontario Cottagers' Associations with Environment and Climate Change Canada, Phragmites collaboratives, Ontario Ministry of Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, parks, and conservation authorities
SUPPORTING MUNICIPALITIES & LOCAL COMMUNITIES				
Enhance support for municipalities and local communities by deploying six municipal green coordinators via strategic municipal partners through federal and provincial employment programs. Includes local contractors, early career professionals, recent graduates, and students.	Addresses gaps in capacity, expertise, and equipment at the local level to enable more effective land management.	Starting with six communities in Ontario: Essex Region, Kawartha Region, Renfrew-Nipissing-Pembroke, Kingston, Ottawa, Muskoka, Niagara	Investment Opportunity: \$500,000 via NOHF and CSJ employment programs Indigenous Participation: Yes Job Creation Estimate: 6 direct, 20 indirect	Invasive Species Centre with Canadian Food Inspection Agency, Ontario Ministry of Natural Resources and Forestry, conservation authorities, and municipalities
Community fund endowment of \$10 million to enable local action via programs and partners. Can support effective high-value opportunities to involve the public, including new exhibits at high-traffic public locations such as urban and regional science centres and museums.	Partners would build on demonstrated capacity to administer grants and funding programs at local level geared at biodiversity and invasive species. Endowment approach allows for long-term sustained funding at the local level, and projects could be rolled out quickly.	Canada-wide	Investment Opportunity: \$10 million via specific project funding Indigenous Participation: Yes Job Creation Estimate: 14 direct, 140 indirect	Invasive Species Centre with NGOs, municipalities, conservation authorities and trusts, museums, and First Nations communities and organizations
BUILDING RURAL OPPORTUNITIES & GETTING SMALL BUSINESS BACK TO WORK				
Local contractor job creation projects to deliver regional conservation and invasive species eradication programs built on existing models used successfully in Ontario.	Expanded regional-scale Phragmites control programs will create jobs for new staff and contractors and improve infrastructure in priority habitats.	Southwestern Ontario (Pelee Island, Norfolk County, Essex, Chatham-Kent, Lambton), Central Ontario East and West (Happy Valley, Rice Lake Plains, Napanee Plain), Midwestern Ontario (Maitland River Valley, Saugeen Bruce Peninsula) and Eastern Ontario (Frontenac Arch, Ottawa River Valley)	Investment Opportunity: \$300,000 via specific project funding Indigenous Participation: Yes Job Estimate: 15 direct, 100 indirect	Nature Conservancy of Canada with trusted private contractors, private landowners, municipalities, and conservation authorities
HARNESSING TECHNOLOGY SOLUTIONS				
Innovative new tools and technologies are ready for widespread use to help communities mitigate impacts of forest pests, invasive aquatic plants, invasive mussels and other invasive species. Keystone project would be a national EDDMapS citizen reporting and open data tool and linked mapping tool for Indigenous communities.	Accelerate implementation of most promising tech: remote sensing and digital mapping, land use and ownership digital tracking, predictive distribution modelling under changing climate, risk assessment, including horizon scanning, improved training and certification of invasive species professionals, real time monitoring of pests and "next wave" pests, new detection technologies including detection canines and drones, innovative Asian Carp deterrent projects, biocontrol and enhanced genomic tools.	Canada-wide	Investment Opportunity: \$1.85 million via specific project funding Indigenous Participation: Yes Job Creation Estimate: 70 direct, 100 indirect	Ducks Unlimited Canada, Nature Conservancy of Canada, Invasive Species Centre with Agriculture & Agri-food Canada, universities, Natural Resources Canada, International Joint Commission, conservation authorities, Ontario Ministry of Natural Resources and Forestry, Fisheries and Oceans Canada, and coastal municipalities

IDEA	OUTCOME	GEOGRAPHY	DETAILS	PARTNERS & CONTRIBUTORS
SUPPORTING TOURISM & RECREATION				
Purchase and install boat wash infrastructure in strategic communities. Proven in many jurisdictions to reduce spread of invasive species, such as zebra mussels, to lakes through recreational boating pathways.	Investments to benefit local contractors, local cottager groups, small businesses, and Indigenous communities, protect tourism and recreation assets, and reduce economic and environmental impacts.	Ontario-wide, including Ontario-Manitoba border. Western Provinces interested in working with Ontario to install boat wash stations at critical pinch points to protect their zebra mussel-free lakes.	Investment Opportunity: \$1.5 million via specific project funding Indigenous Participation: Yes Job Creation Estimate: 50 direct, 50 indirect	Ducks Unlimited Canada, Ontario Federation of Anglers and Hunters, Invasive Species Centre, Federation of Ontario Cottagers' Associations with Ontario Ministry of Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, municipalities with higher-traffic marinas, boating associations, conservation authorities, Western provinces, and First Nations communities
RE-IMAGINING RIVERS				
Canada's legacy barriers/dams are a long-standing area of concern, negatively impacting fish passage and stream health with roles in invasive species control and flood management in a changing climate. Many issues, such as structural safety and ownership, complicate mitigating these barriers and a comprehensive, longterm, national program is ultimately needed. Short term, there are opportunities to take action on priority projects, and assessment/planning may already be underway.	Dam review, removal, redesign, or replacement of barriers would employ local contractors, improve fish passage, control invasive species, and address climate change and flood risks.	Regional - Great Lakes Basin and priority inland rivers; scalable to a national level	Investment Opportunity: \$10 million over 5 years via infrastructure initiatives/frameworks Indigenous Participation: Yes Job Creation Estimate: 83 jobs	Local and provincial stakeholders, conservation authorities and municipalities, Great Lakes Fishery Commission, International Joint Commission, academic researchers, Ontario Ministry of Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, and Fisheries and Oceans Canada
RESTORING REGIONAL HABITATS & SUPPORTING SPECIES AT RISK				
Habitat loss and degradation is a leading contributor to biodiversity loss and impaired sustainable resource use. Landscape-scale habitat creation and rehabilitation projects require a sustained funding program to support the significant capacity, knowledge, data, species sensitivity, and biological expertise needed for impactful and strategic results. Partners bring strong relationships with trusted restoration contractors.	Restoration projects focused on invasive species removal, climate change mitigation, and improving watershed health will provide immediate work for contractors, while achieving priority conservation targets that benefit native fish and wildlife populations, including species at risk.	Canada or Ontario-wide but projects are local	Investment Opportunity: \$24 million over 3 years for stakeholder NGOs, conservation authorities, municipalities Indigenous Participation: Yes Job Creation Estimate: 200 jobs	Ducks Unlimited Canada, Ontario Federation of Anglers and Hunters, Nature Conservancy of Canada, with conservation authorities, municipalities, and provincial and local stakeholder groups as other potential project leads
Constructing a new conservation facility for a shovel ready turtle conservation initiative project to be located on donated land where preliminary design for the main building has already been created.	To leverage public and private funding opportunities to create a new facility for the Ontario Turtle Conservation Centre and support the infrastructure sector in the Peterborough-Kawartha community.	Peterborough-Kawartha	Investment Opportunity: \$2 million via infrastructure initiatives/frameworks Indigenous Participation: Yes Job Creation Estimate: 25 direct, 25 indirect	Ontario Turtle Conservation Centre with conservation groups, SAR, and Peterborough-Kawartha construction companies
PROTECTING INFRASTRUCTURE				
Invasive common reed (Phragmites) continues to impact coastal wetlands environmentally, socially, and economically. Community-based regional-scale invasive Phragmites control in priority habitats would be supported and expanded, including outreach and awareness, preparing control plans, and hiring contractors for mechanical/chemical/physical treatments. Partners would fill gaps in comprehensive mapping, which are limiting our abilities to combat this wetland invader.	Results in employment and skill development for local contractors, community involvement, increased public safety, reduced infrastructure costs and improved habitat.	Phase 1: Long Point, Brighton/Eastern Lake Ontario Coast, Essex Region, Bruce Peninsula, Lake Huron coast Phase 2: Scalable to provincial level	Investment Opportunity: \$3.75 million over 3 years via CNF or other government-coordinated funding or specific project funding Indigenous Participation: Yes Job Creation Estimate: 15 direct	Nature Conservancy of Canada with Federation of Ontario Cottagers' Associations, local Phragmites landowner groups, conservation authorities, parks, Ontario Ministry of Natural Resources and Forestry, municipalities, cottage/boating associations, First Nations communities, and NGOs
Strategic forest health investment in a select group of forest pest gaps would enable Ontario, and neighbouring provinces, to insulate themselves from emerging forest pest concerns, which would have negative impacts on the region's forests, forest sector, and private and public land managers.	Strengthening capacity to detect and respond to emerging invasives will help avoid the devastating consequences and costs that other notable forest pests (e.g. emerald ash borer) have caused to forest industry and taxpayers in recent years.	Ontario-wide and Niagara-West	Investment Opportunity: \$500,000 via specific project funding Indigenous Participation: Yes Job Creation Estimate: 6 direct	Invasive Species Centre with Canadian Food Inspection Agency, Ontario Ministry of Natural Resources and Forestry, conservation authorities, private woodlot owners, maple syrup producers, firewood producers, and other forest industry stakeholders