

Randal's role: product testing and technical support, internal IT, system and product engineering, business planning, team leadership

<http://www.icanmarine.com/>

The screenshot shows the homepage of the ICAN website. The header features a blue background with a globe icon containing a red maple leaf and the text "ICAN". To the right, a banner reads "Marine Navigation & Surveillance Solutions" over a background image of a harbor with several ships. The top navigation bar includes links for Company, Solutions, Products, Support, Dealers, and News. A red banner across the middle contains the text "Building Relationships Through Customer Satisfaction." On the left, a large image of a harbor scene with a tugboat is labeled "Marine Port Monitoring & Surveillance". On the right, a sidebar titled "Solutions for your industry" lists links for Port Authorities, Maritime Administrations, Coast Guards, Workboat Operators, and Military. Another sidebar titled "New Products From ICAN" lists DataStore, Maestro, and Sentinel. At the bottom, there are links for Latest ICAN News and Complete Customization to Meet Customer Requirements.

Company Solutions Products Support Dealers News

ICAN Marine Navigation & Surveillance Solutions

Building Relationships Through Customer Satisfaction.

HOME PRINT SEND

Marine Port Monitoring & Surveillance

Solutions for your industry

- [Port Authorities](#)
- [Maritime Administrations](#)
- [Coast Guards](#)
- [Workboat Operators](#)
- [Military](#)

New Products From ICAN

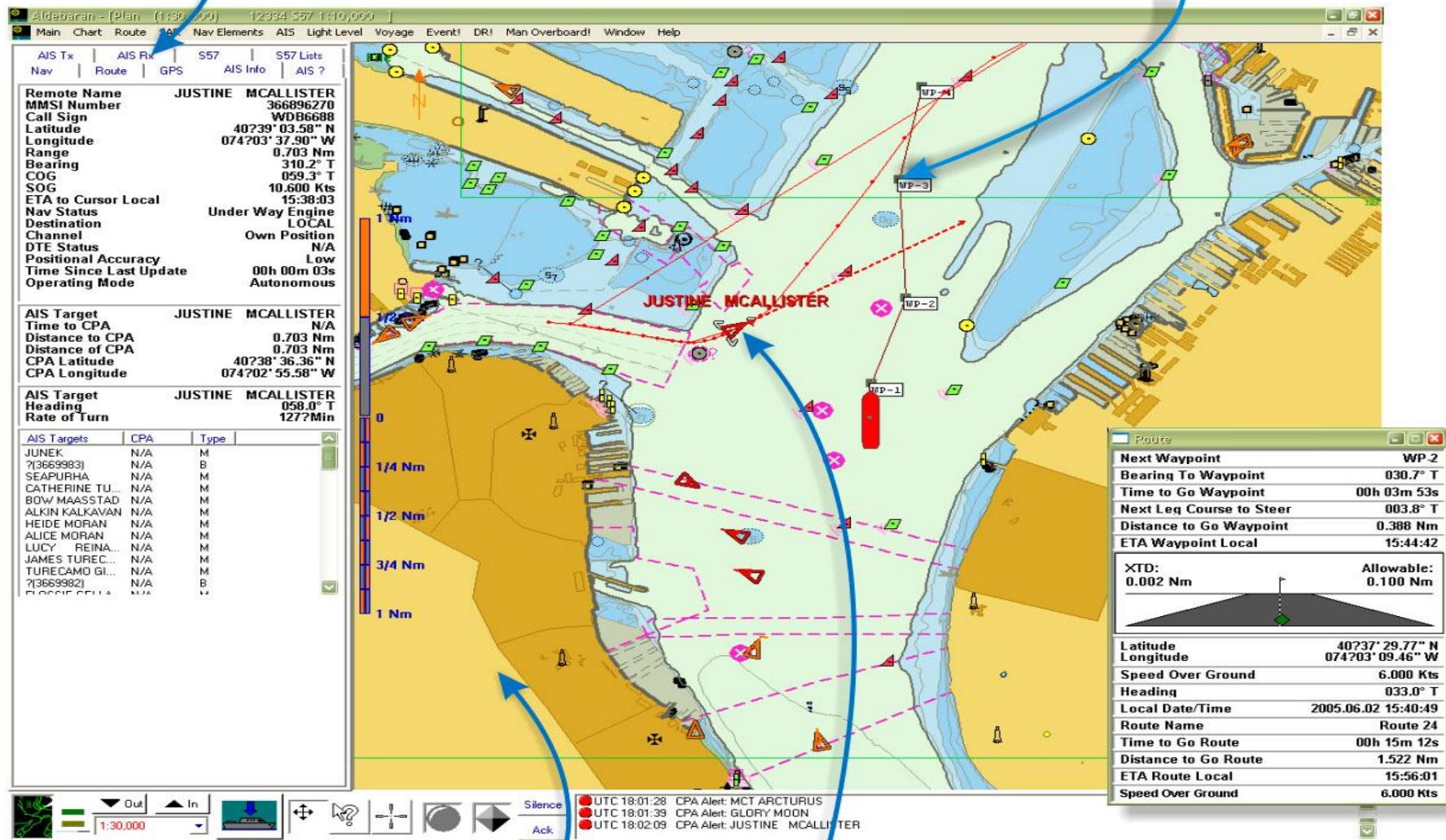
- [DataStore](#): Data logging & playback for AIS networks
- [Maestro](#): AIS Service Manager (ASM)
- [Sentinel](#): Surveillance & Tactical Information System

Early Identification. Enhanced Safety. Informed Decisions.

Latest ICAN News Complete Customization to Meet Customer Requirements

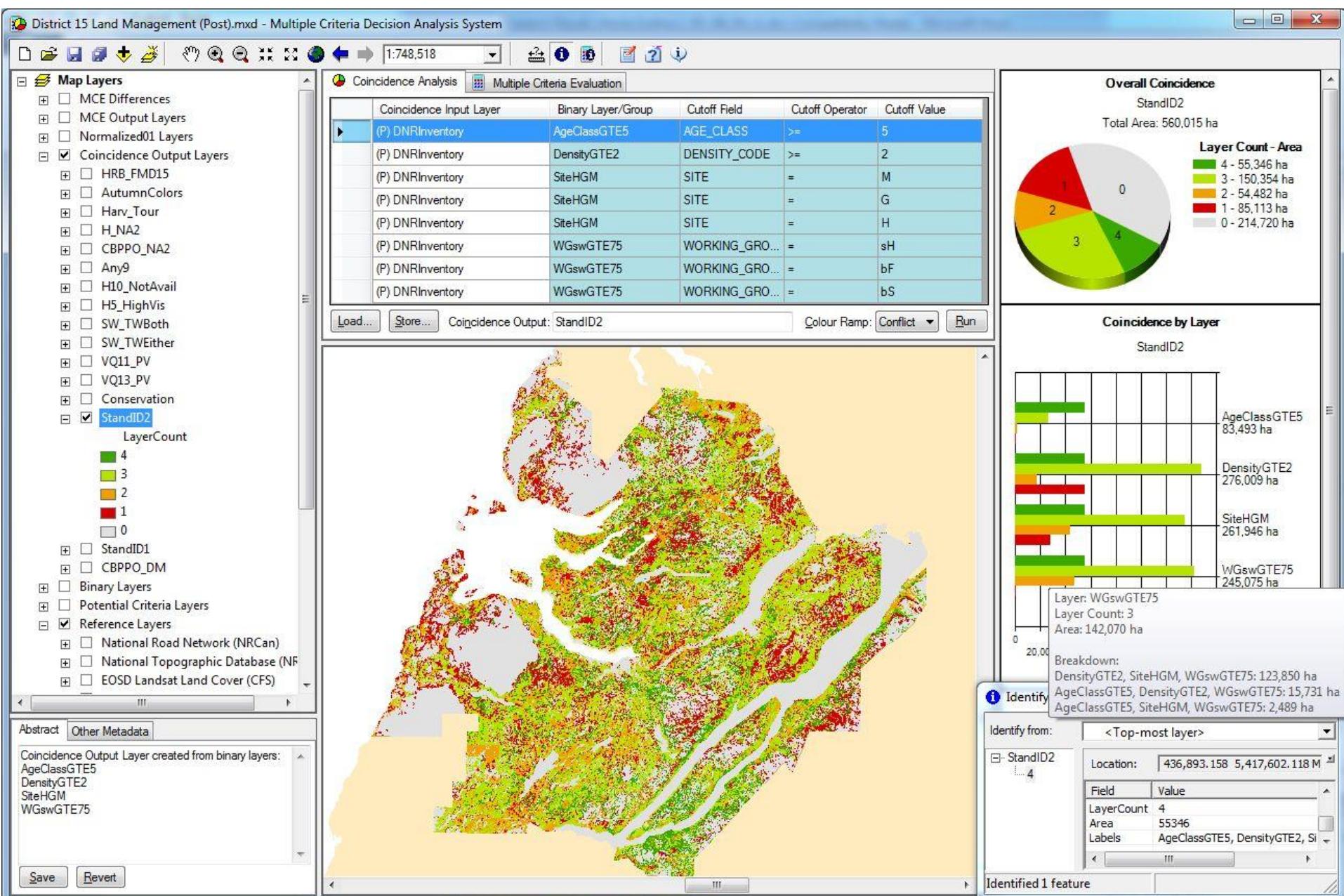
ICAN's customizable InfoPanels gives you the flexibility to view relevant information to meet your unique requirements.

Effectively plan operations with ICAN's route planning and monitoring tools which allow you to reduce travel time and fuel consumption. All routes can be saved in our route database for future use or to send route information to other vessels.



Aldebaran II offers a seamless display of multiple chart formats simultaneously. Regulus II can display any two chart combinations of your choice. Available chart formats include: BSB, S-57 (ENC), CM-93, ARCS, and NTX.

ICAN ECS software includes complete AIS capability to display static, dynamic, and vessel related information. You can query AIS targets to view their heading, speed, cargo, MMSI, etc. More information of vessel traffic allows you to make better decisions.

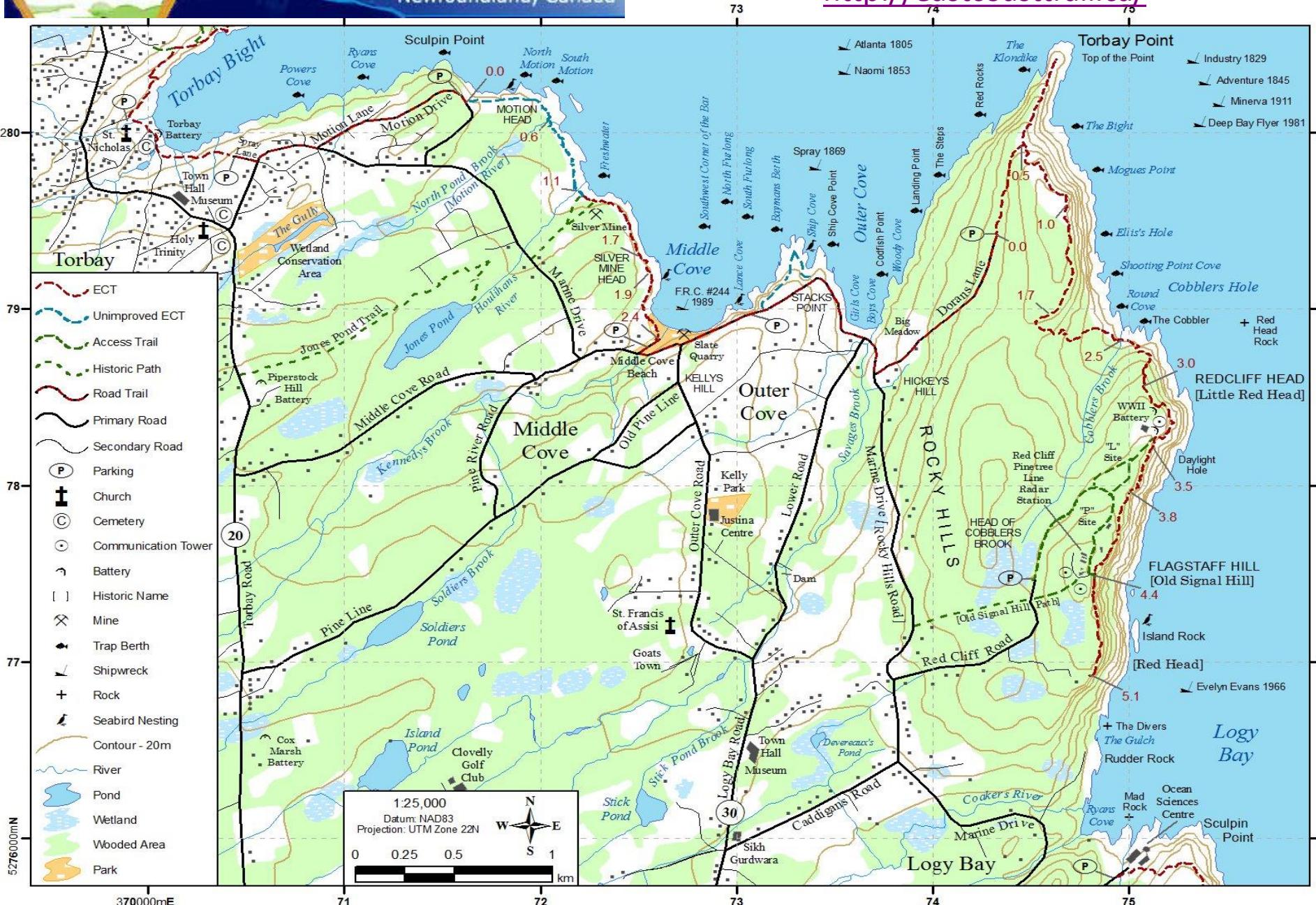


Explore  
the East Coast Trail of  
Newfoundland, Canada

East Coast Trail

Randal's role: trail mapping and elevation profiling

<http://eastcoasttrail.ca/>



Randal's role: development, testing and documentation of ArcGIS tools for multi-criteria evaluation models for conservation prioritization

<http://islandstrust.bc.ca/>

The screenshot shows the homepage of the Islands Trust website. At the top, there is a banner featuring a close-up photograph of a tree trunk with peeling bark. On the left side of the banner is the Islands Trust logo, which includes a stylized green tree icon and the text "Islands Trust". To the right of the logo is a search bar with a magnifying glass icon. Below the banner is a navigation menu with six items: "HOME" (highlighted in orange), "ISLANDS", "TRUST COUNCIL", "MAPS", "HOW DO I?", and "CONNECT WITH US".

## Welcome to the Islands Trust

Preserving **Island** communities, culture and environment

The Islands Trust is a unique federation of local governments serving islands in the Salish Sea. We are responsible for preserving and protecting the islands' unique amenities and environment. [Read more >>](#)

**MEETING CALENDAR** **CONTACT ISLANDS TRUST** **SUBSCRIBER OPTIONS**

**ISLANDS TRUST QUICKLINKS** [Advocacy](#)

**What's New?**

**August 12, 2013 | Islands Trust Annual Report**  
The 2012-2013 Annual Report and Audited Financial Statements are now available [here](#).

**August 6, 2013 | September Trust Council Program Announced**  
The [agenda](#) for the September Trust Council meeting is now available.

**ABOUT US**

The Islands Trust area covers the islands and waters between the BC mainland and southern Vancouver Island....

**VANCOUVER ISLAND**

Nanaimo, Victoria, Vancouver

Strait of Georgia

CANADA USA

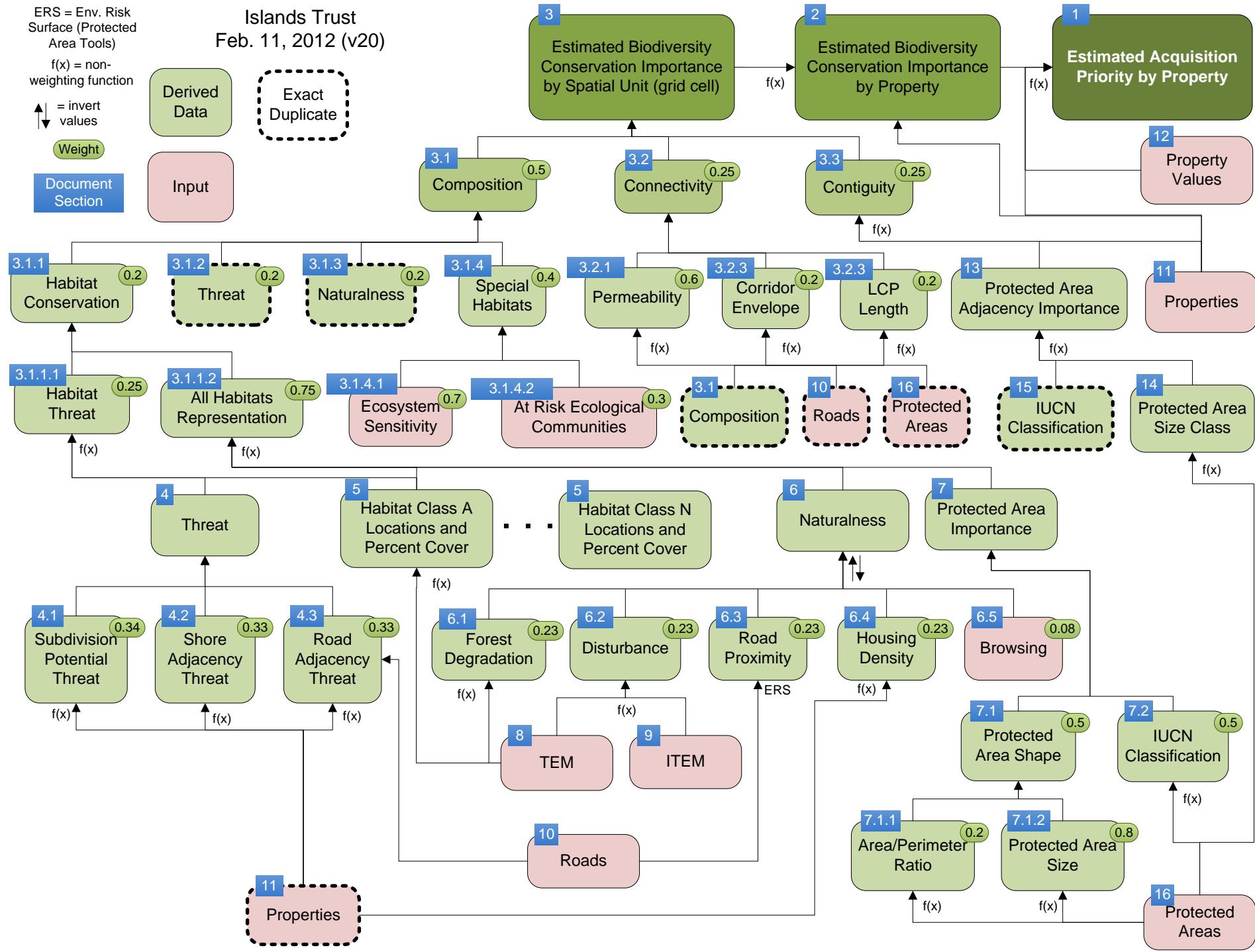
ERS = Env. Risk Surface (Protected Area Tools)

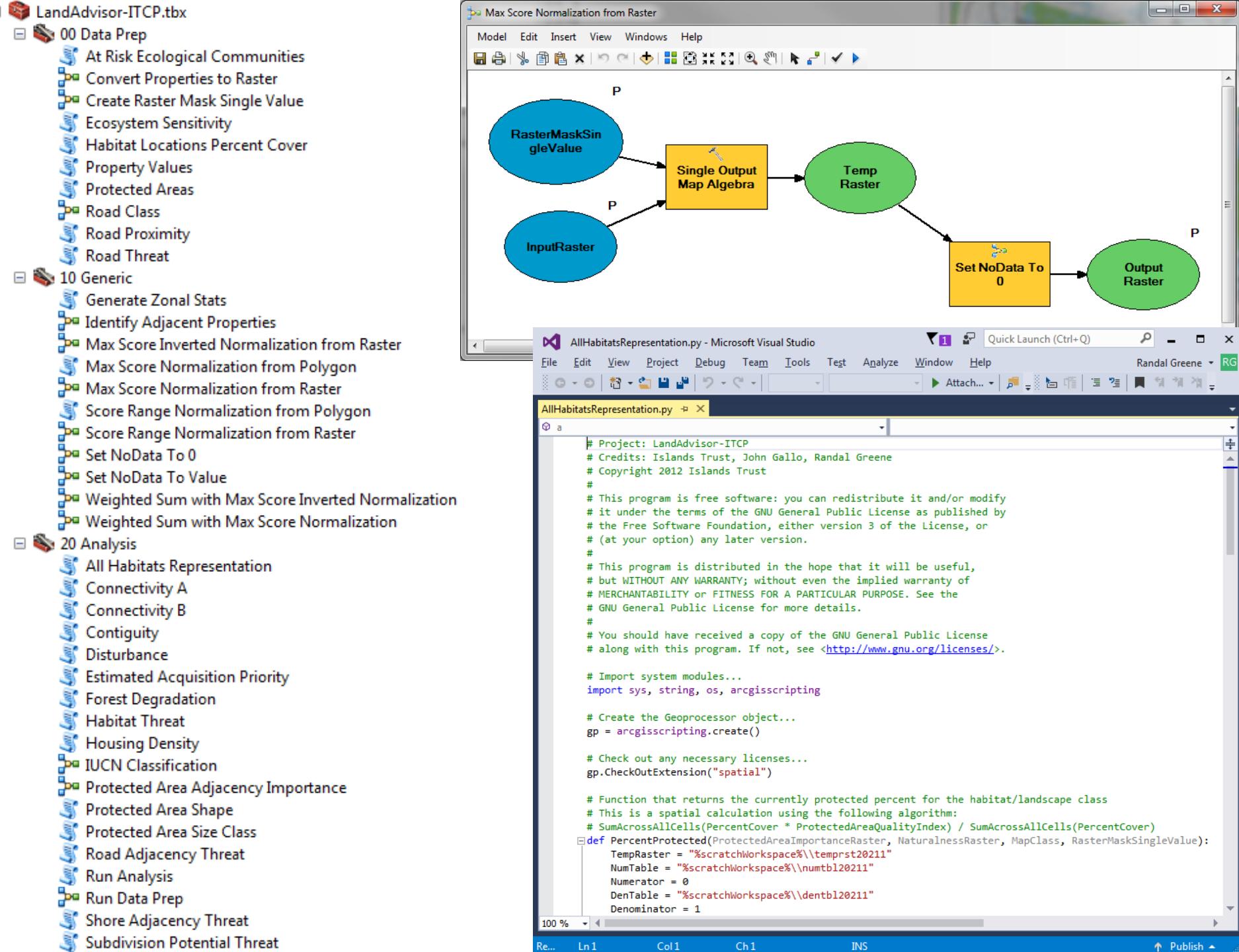
$f(x)$  = non-weighting function

= inverse values

Weight

Islands Trust  
Feb. 11, 2012 (v20)







Islands Trust Fund  
Regional Conservation Plan  
December, 2011

**Estimated Biodiversity  
Conservation Importance  
by Spatial Unit**  
Gabriola Island

Estimated Relative Importance

- 1.0: Higher
- 0.5: Medium
- 0.1: Lower
- No Values Modeled
- Protected Areas
- Recreational Parks



Project Coordinator:  
Mike Ellingsen - Islands Trust Fund  
Natalie Murray - Islands Trust Fund

Analysis and Modeling Support Services:  
John Goss - Conservation International  
Randy Greene - Conservation Science  
Van der Valk - University of Arizona

Scale: 0 1 2 Kilometers



Islands Trust Fund  
Regional Conservation Plan  
December, 2011

**Estimated Biodiversity  
Conservation Importance  
by Property  
Gabriola Island**

Estimated Relative Importance

- 1.0: Higher
- 0.5: Medium
- 0.1: Lower
- No Values Modeled
- Protected Areas
- Recreational Parks

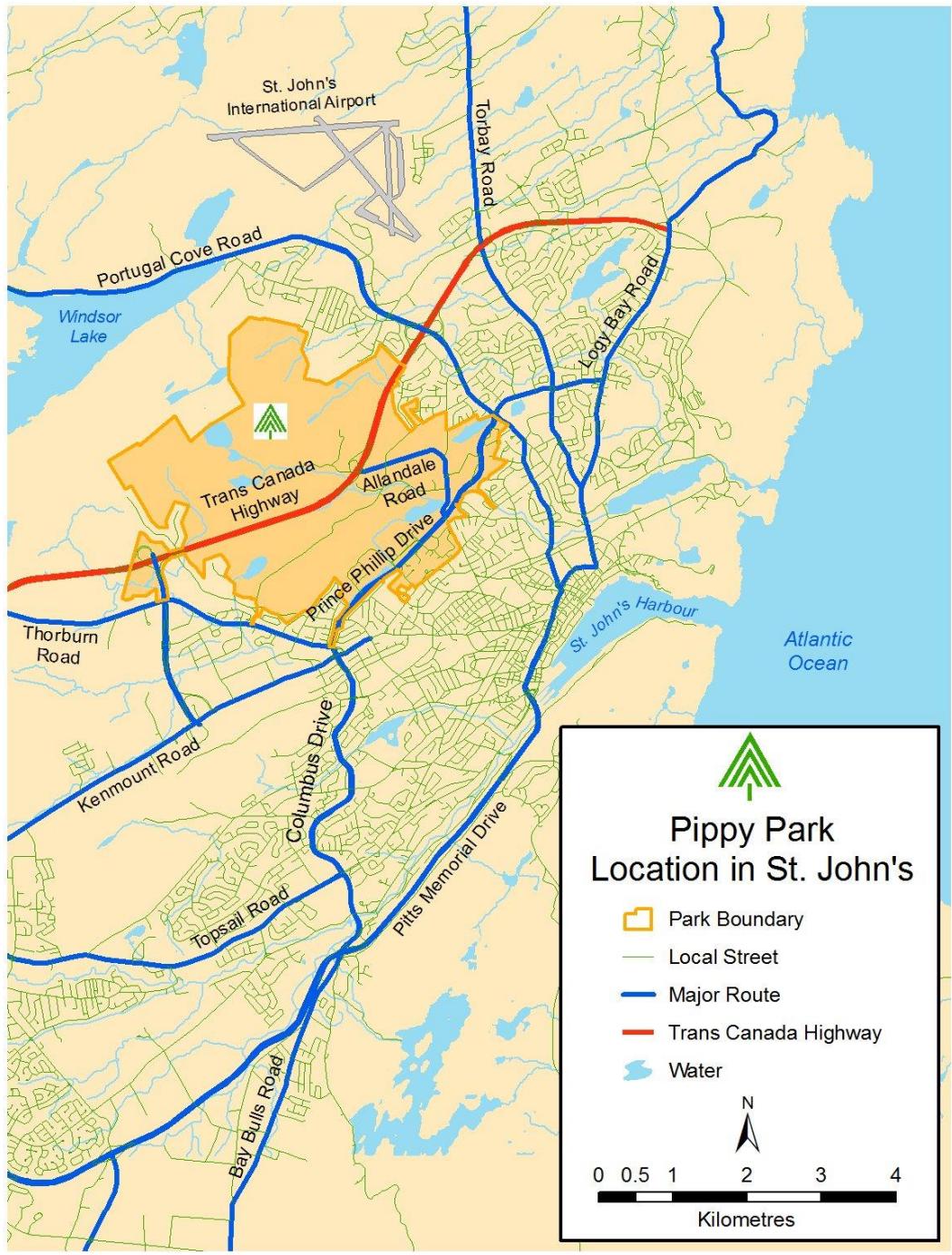


Project Coordination  
Kate Chisholm - Islands Trust Fund  
Data Entry - Islands Trust Fund  
Analysts and Modeling Support Services  
John Doherty - Conservation Science  
Recreational Parks - Conservation Science  
Mark van Beurden - Islands Trust Fund

0 1 2 Kilometers

Randal's role:  
park and trail mapping

<http://pippypark.com/>



A

B

C

D

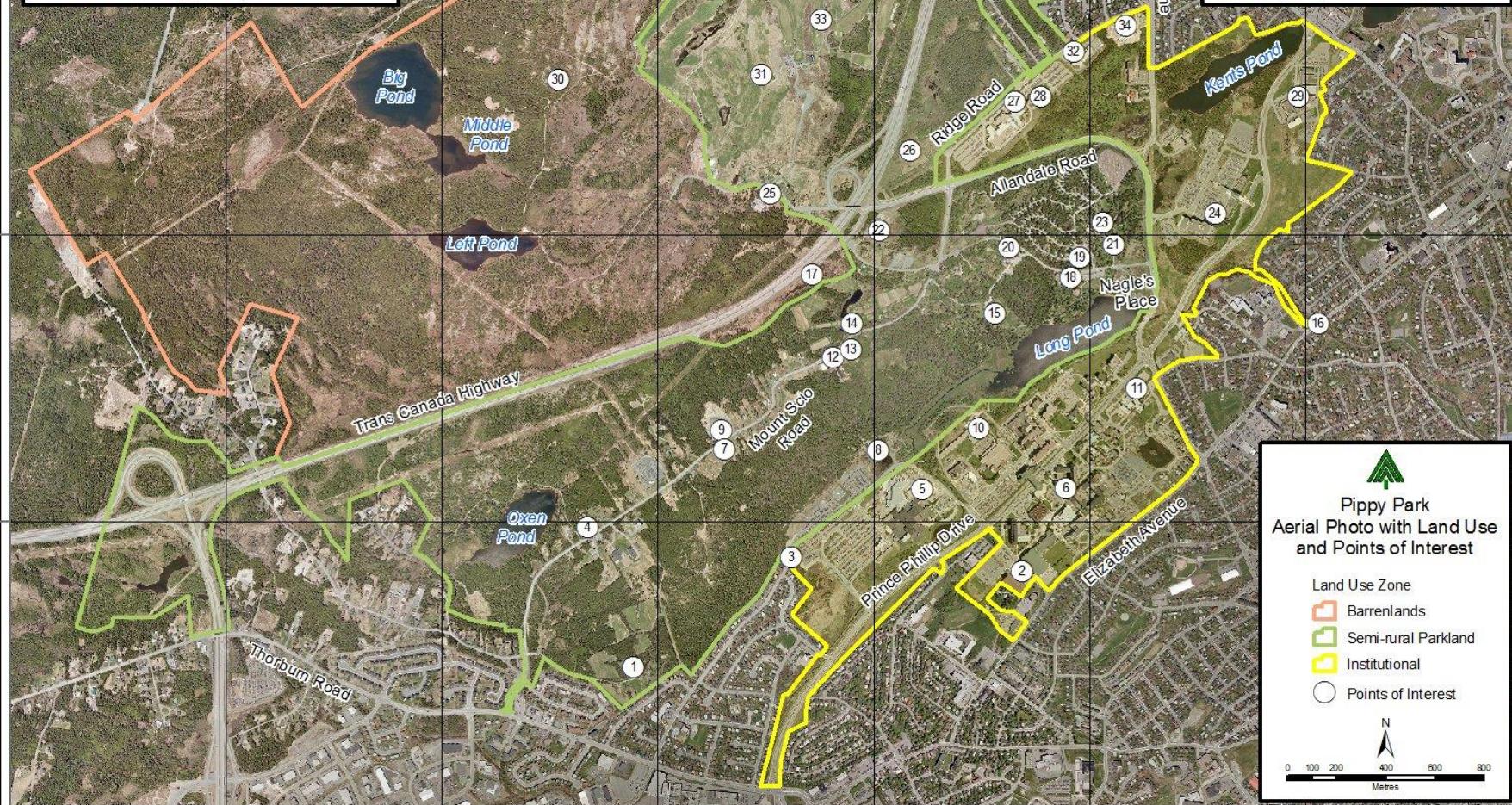
E

F

G

- Admiral's Green Golf Course (#33 - D2)  
 Arts and Culture Centre (#11 - F3)  
 Bicycle Newfoundland and Labrador (#22 - E2)  
 Botanical Garden (#4 - C4)  
 Campground (#19 - E3)  
 Captain's Hill Golf Course (#31 - D2)  
 Centre scolaire et communautaire des Grands-Vents (#32 - E2)  
 Ches Penney Family 'Y' (#34 - F2)  
 College of the North Atlantic (#28 - E2)  
 College of the North Atlantic (#29 - F2)  
 Confederation Hill (#24 - F2)  
 Country Laundry (heritage structure) (#20 - E3)  
 Driving Range (#26 - E2)  
 Elaine Dobbin Centre for Autism (#8 - E3)  
 Fogarty's Wetland (#17 - D3)  
 General Hospital (#5 - E3)  
 Grand Concourse Authority (#25 - D2)

- Highest Point in Park (231m) (#30 - C2)  
 Husky Energy Easter Seals House (#9 - D3)  
 Institute for Ocean Technology (#10 - E3)  
 Lowest Point in Park (38m) (#16 - G3)  
 MacMorran Community Garden (#7 - D3)  
 Marine Institute (#27 - E2)  
 Memorial University of Newfoundland (#6 - E3)  
 Mercy Centre for Ecology and Justice (#13 - D3)  
 Mini Golf (#21 - F3)  
 Mount Scio Farm (#14 - D3)  
 Mount Scio House (#15 - E3)  
 North Bank Lodge (#23 - F2)  
 O'Brien Farm Provincial Historic Site (#1 - C4)  
 Ronald McDonald House (#3 - D4)  
 St. John's Therapeutic Riding Association (#12 - D3)  
 Suncor Fluvarium (#18 - E3)  
 The Works (#2 - E4)



# Randal's role: stakeholder requirements, spatial data development and conservation priority modeling, with print publishing and web-based interactive delivery

[Labrador Nature Atlas, volume 1](#)

[Labrador Nature Atlas, volume 2](#)

<http://www.nlnatureatlas.ca/>



[Français](#) | [Media](#) | [Blog](#)

[Who We Are](#) | [What We Do](#) | [Where We Work](#) | [What You Can Do](#)

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## Labrador Conservation Blueprint



*Coastal hike, Forteau Labrador, Newfoundland and Labrador (Photo by NCC)*

Labrador, or "The Big Land" as it is affectionately known, is 294,330 square kilometres, or twice as large as Nova Scotia, New Brunswick and PEI combined. This vast area encompasses tundra, taiga and boreal forest ecosystems — from the severe, stark beauty of lichen-strewn barrens to the rich softwood forests of Canada's eastern boreal. Labrador's Torngat Mountains boast the highest peaks east of the Rockies, while its forests represent some of the largest intact ecosystems in the world!

### [Labrador Blueprint at a glance](#)

- stretches inland from the Strait of Belle Isle and north to the tip of Cape Chidley at the mouth of Ungava Bay;
- NCC is engaged in a collaborative effort to identify areas of high conservation value throughout this enormous geographic region;
- most of the work to date has focussed on developing a "Labrador Nature Atlas" that maps the special natural areas and features of a region. This information will be used to help our partners in government, Aboriginal organizations, academia, industry and other conservation groups in making wise and sustainable land use planning and resource management decisions.



## Protected Areas

Parks and protected areas cover 3.3% of Labrador. Establishing the Mealy Mountains National Park Reserve and Eagle River Waterway Provincial Park raise it to about 8%.

photo by Chris P. Sampson

## Featured Maps



Enduring  
Features



Seabird Colonies



Human Footprint



Protected Areas

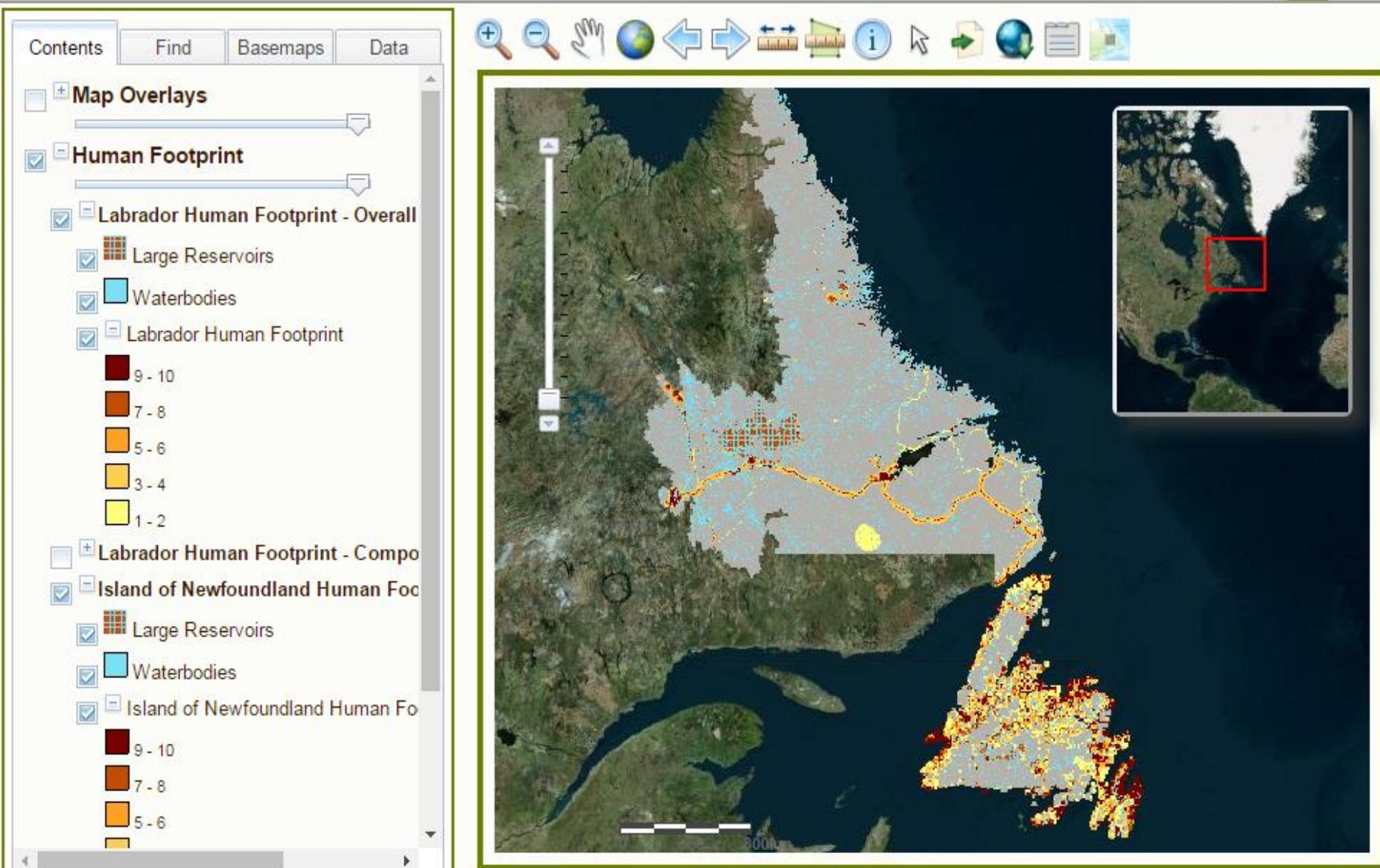


Wetlands

All Maps

# Human Footprint

The Human Footprint for Newfoundland and Labrador illustrates the level of human industrial development on the natural landscape as of 2012. [Read more](#)



# Enduring Features

Three characteristics of the non-living world —elevation, geology and landform — are referred to here as "enduring features". In combination with climate, they are important determinants of Labrador's biological diversity. In many ways they describe the ecological potential of the landscape. Combined into "ecological land units" (ELUs), they uniquely characterize landscape variability. [Read more.](#)



Contents    Find    Basemaps    Data

**Map Overlays**

**Place Names**

- Populated Place Names
- Other Place Names
- Innu Place Names
- Waterbody Names
- Natural Feature Names

**Labrador Road Network**

- Highway
- Other Road

**Labrador-Quebec Border**

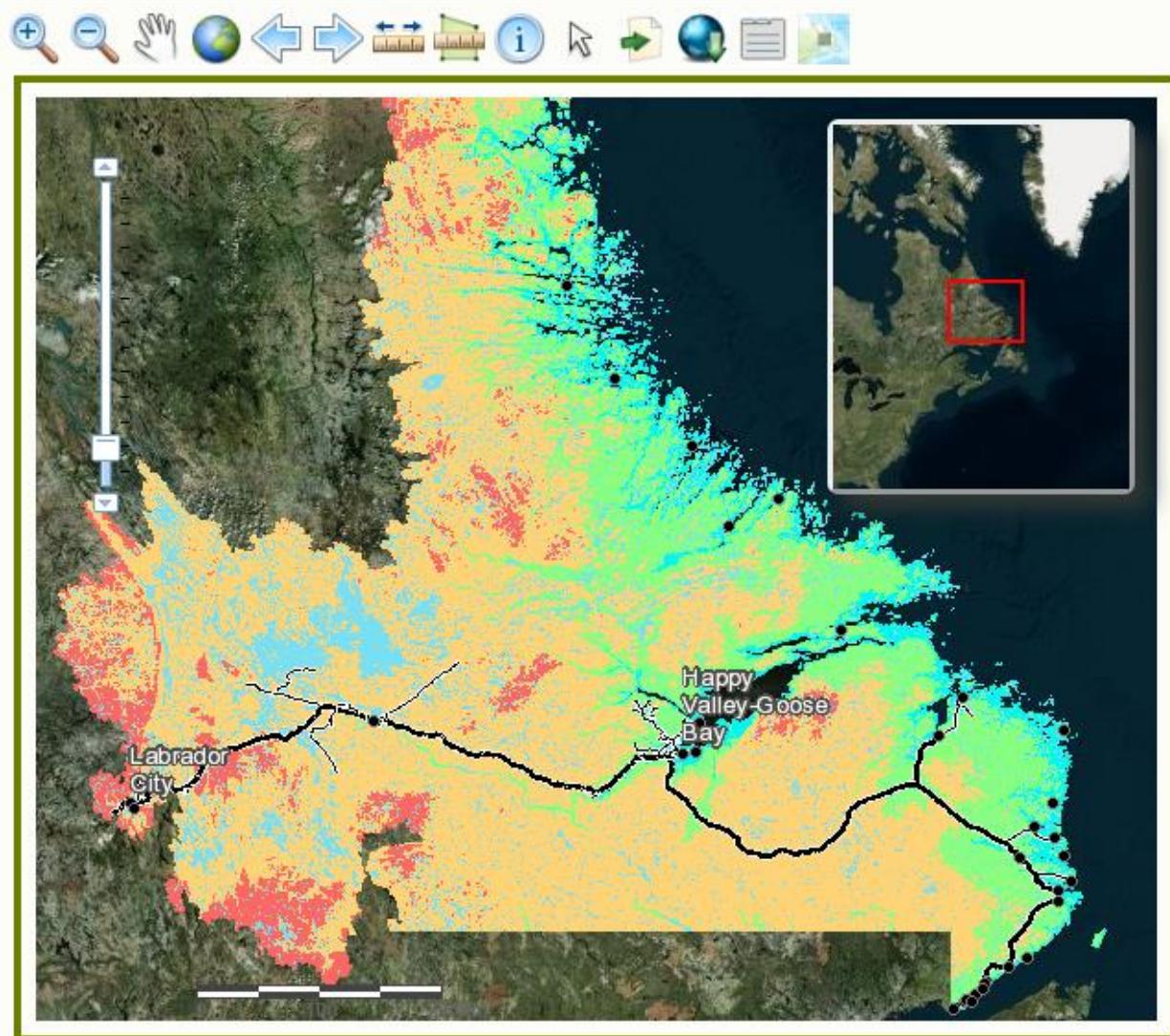
**Watercourse**

**Waterbody**

**Enduring Features**

**Elevation Classes**

- 0-50 m
- 51 - 300 m
- 301 - 600 m
- 601 - 900 m





Water  
Quality  
Project

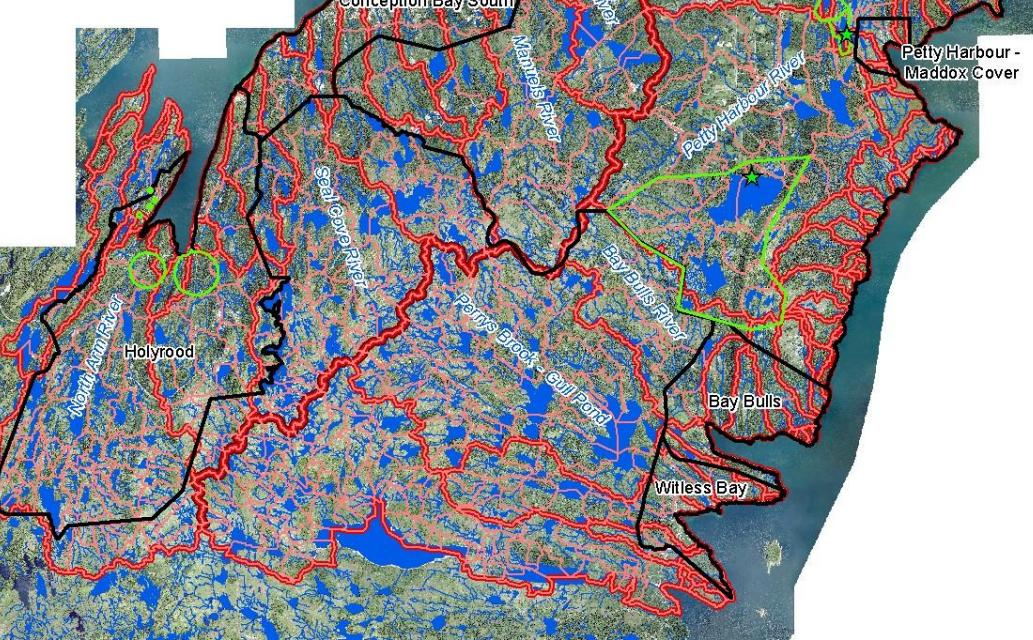
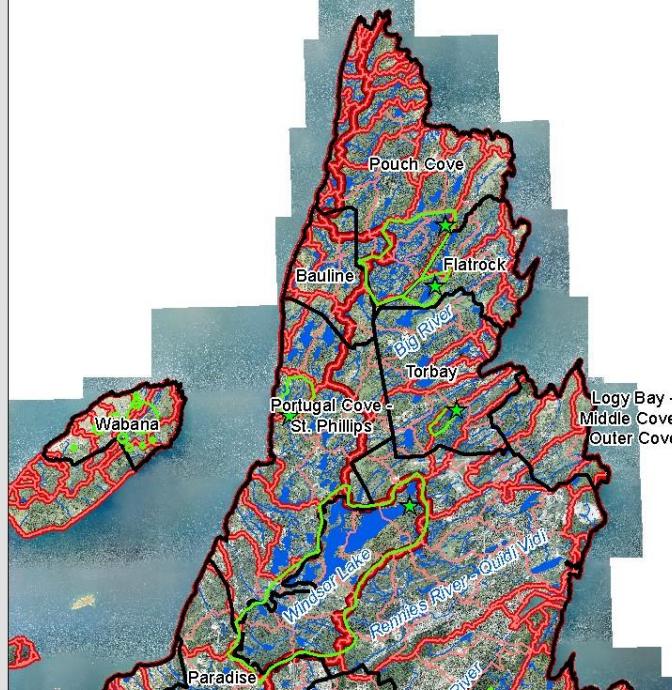
## Watersheds

- ★ Protected Water Supply Intakes
- ✚ Protected Water Supply Areas
- East/West Watershed Boundary
- ─ Watersheds (major)
- ─ Catchments
- ─ Water
- ─ Municipal Boundaries

0 5 10 km

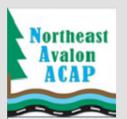
Data Sources:  
NAACAP  
Government of Newfoundland and Labrador  
Government of Canada

© 2014 NAACAP



Randal's role:  
delineation of elevation, multi-scale  
watersheds, land cover and  
intactness in support of drinking  
water quality management

[https://www.mun.ca/harriscentre/reports/arf/2012/Edinger\\_Hermanutz  
Water 12 13 Final.pdf](https://www.mun.ca/harriscentre/reports/arf/2012/Edinger_Hermanutz_Water_12_13_Final.pdf)



Water  
Quality  
Project

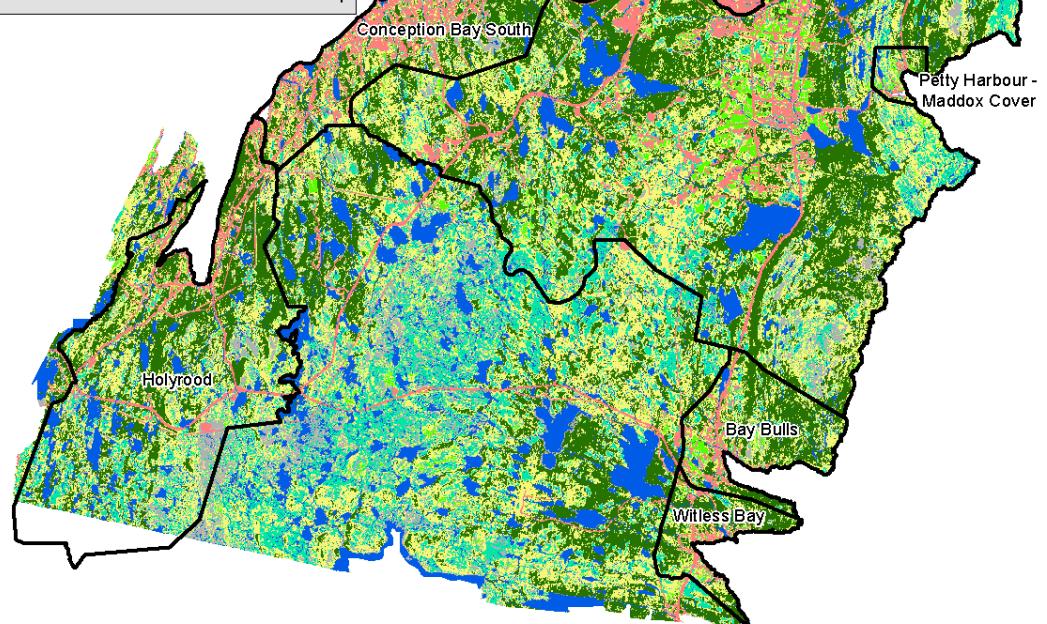
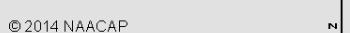
### Land Cover

- Barrens / Bare Rock
- Developed
- Farms and Greenspace
- Forest
- Other Vegetation / Heath
- Water
- Wetlands
- Municipal Boundaries

0 5 10 km

Data Sources:  
NAACAP  
Government of Newfoundland and Labrador  
Government of Canada

© 2014 NAACAP



# Randal's role: analysis, design and development of the crowdsourcing platform Information System for Small-scale Fisheries

<http://issf.toobigtoignore.net>



Global Partnership for Small-Scale Fisheries Research



Search...



Home

About TBTI

Output ▾

Research Clusters ▾

People ▾

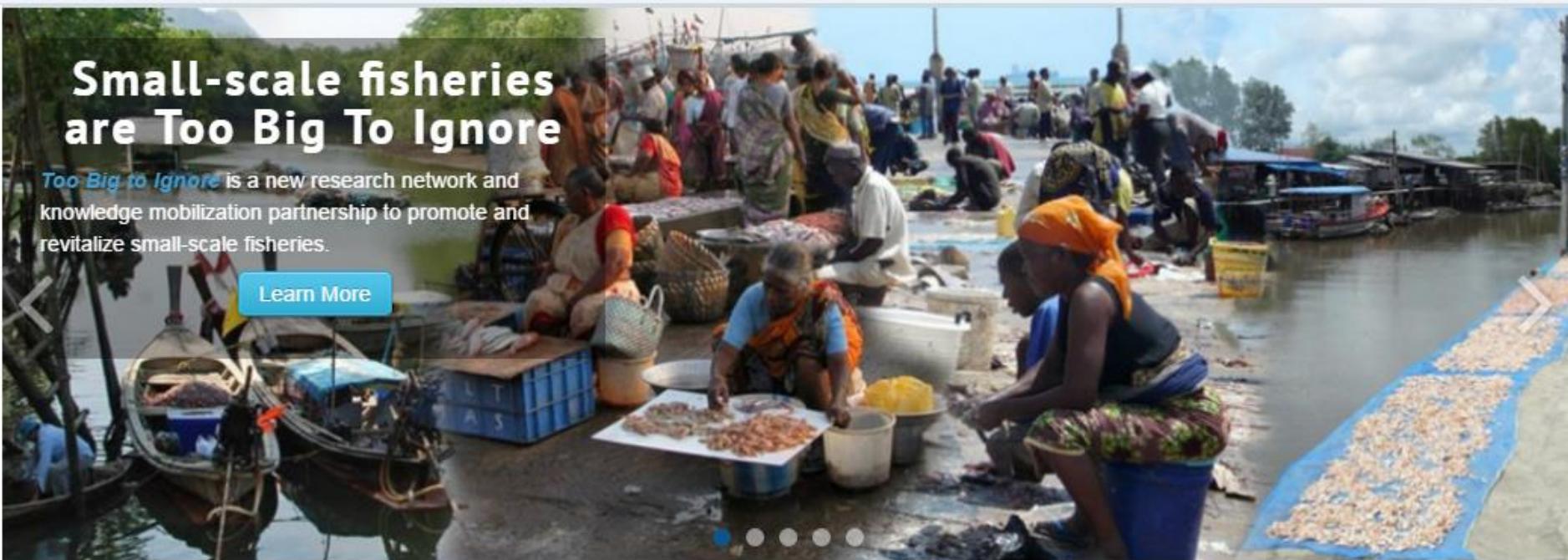
ISSF

News & Info ▾

## Small-scale fisheries are Too Big To Ignore

*Too Big to Ignore* is a new research network and knowledge mobilization partnership to promote and revitalize small-scale fisheries.

Learn More



Latest News

[View all]

TBTI Connect

[View all]

Research Clusters

[View all]



Map



Table




Search

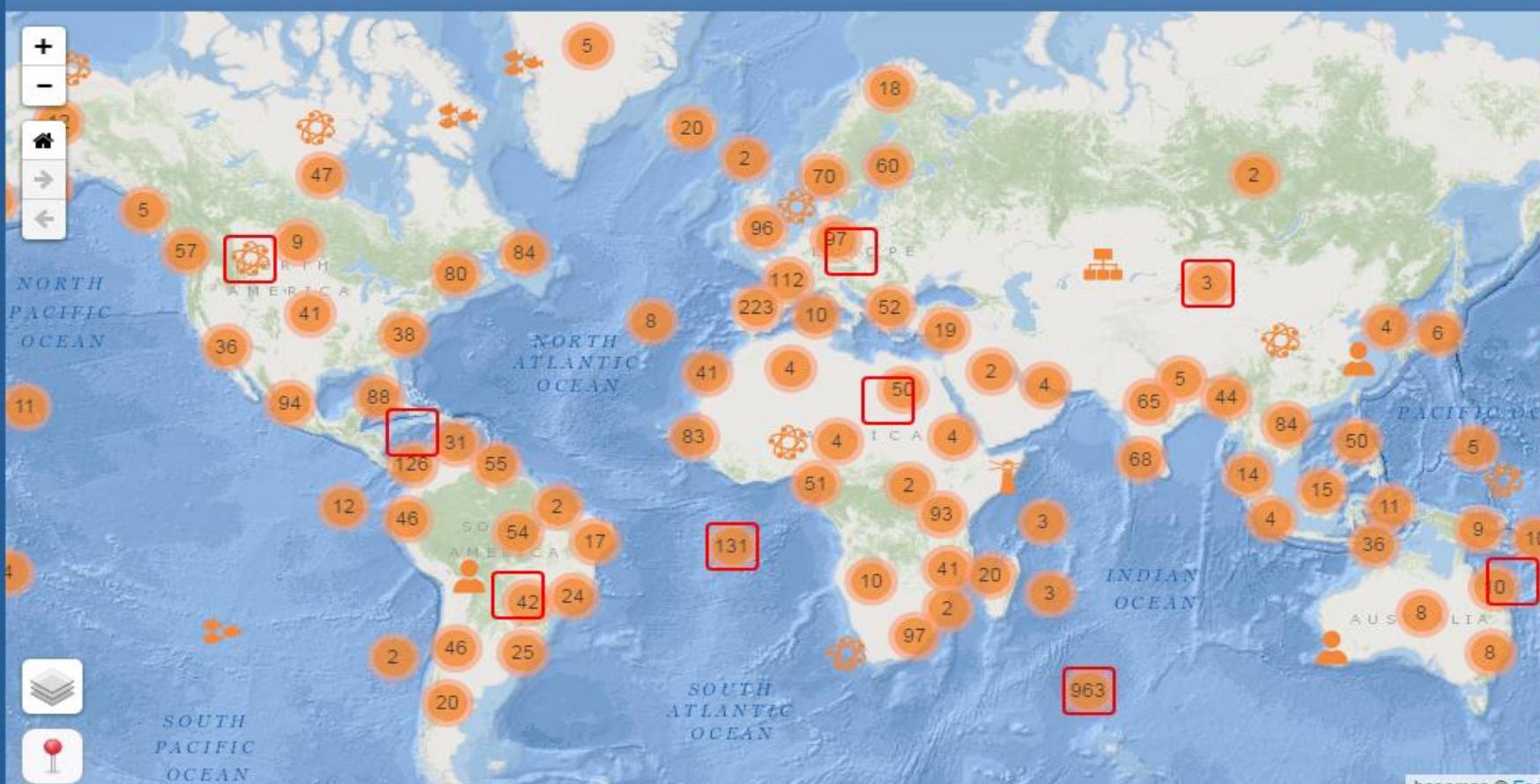
Export Data

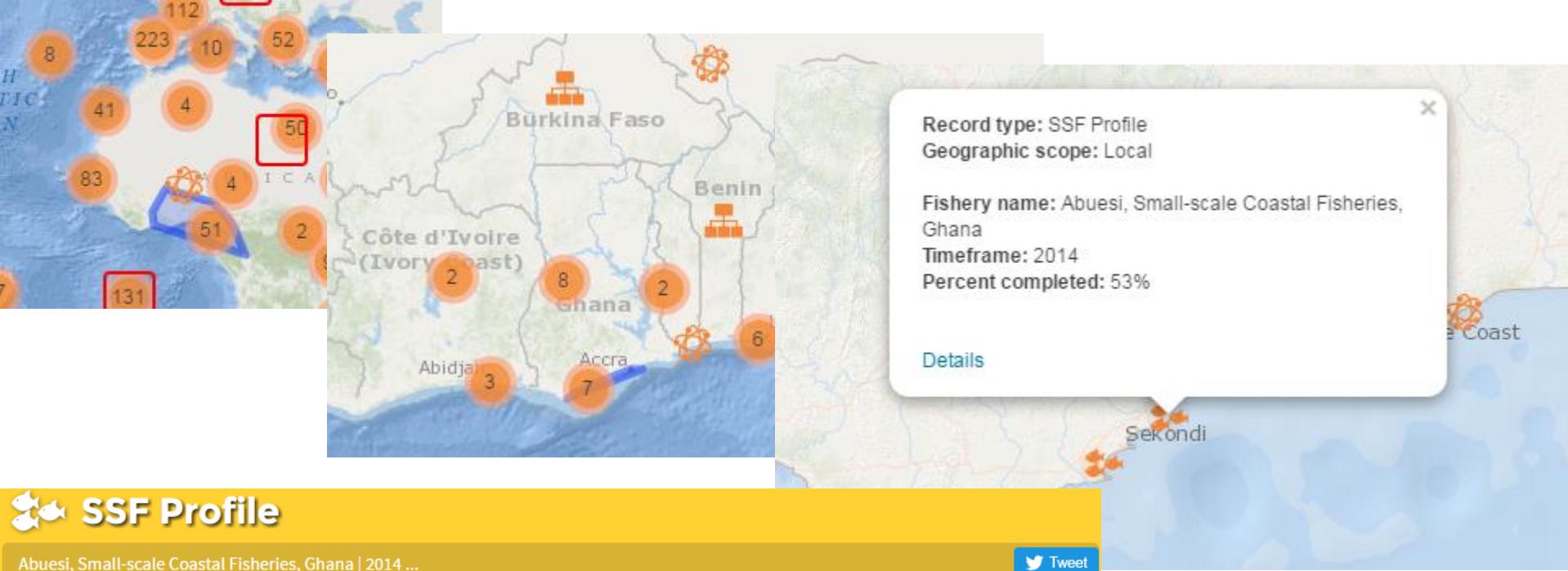
Current Search Terms: None (showing all 2744 records)

 Advanced Search



basemap © Esri





## SSF Profile

Abuesi, Small-scale Coastal Fisheries, Ghana | 2014 ...

[Tweet](#)

### Background

Fishery name	Abuesi, Small-scale Coastal Fisheries, Ghana
SSF Defined?	Not explicitly
<b>SSF Definition (if applicable)</b>	
Data time frame	2014
Contributor	<a href="#">gfreduah (George Freduah)</a>
Contribution date	06/19/2015

**53%  
completed**

[Generate Report](#)

[Compare Profiles](#)

- Download a 'fillable' PDF form in [English](#), [French](#), [Spanish](#), or [Portuguese](#) to see what information is required in an SSF Profile and to complete the form offline.
- [Click here for an example of an SSF profile: Pontal do Parana, Brazil.](#)

### Geographic Scope

Local Abuesi, Shama District Assembly, Western Region of Ghana. ( Aboesi)    Rural, less developed    Ghana

0 Comments [Sort](#)

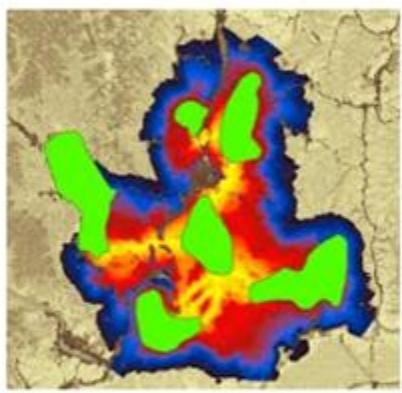
Add a comment...

# Randal's role: analysis, design and development of enhancements to the Linkage Mapper ArcGIS geoprocessing tools

<http://www.circuitscape.org/linkagemapper>

Welcome | About | Downloads | Pubs | **More Tools** | Links

## Linkage Mapper



**Linkage Mapper** is a GIS tool designed to support regional wildlife habitat connectivity analyses. It consists of several Python scripts, packaged as an ArcGIS toolbox, that automate mapping of wildlife habitat corridors. We developed Linkage Mapper for the Washington Wildlife Habitat Connectivity Working Group's (WHCWG) [2010 statewide connectivity analysis](#), and are making them public for use in other wildlife connectivity assessments.

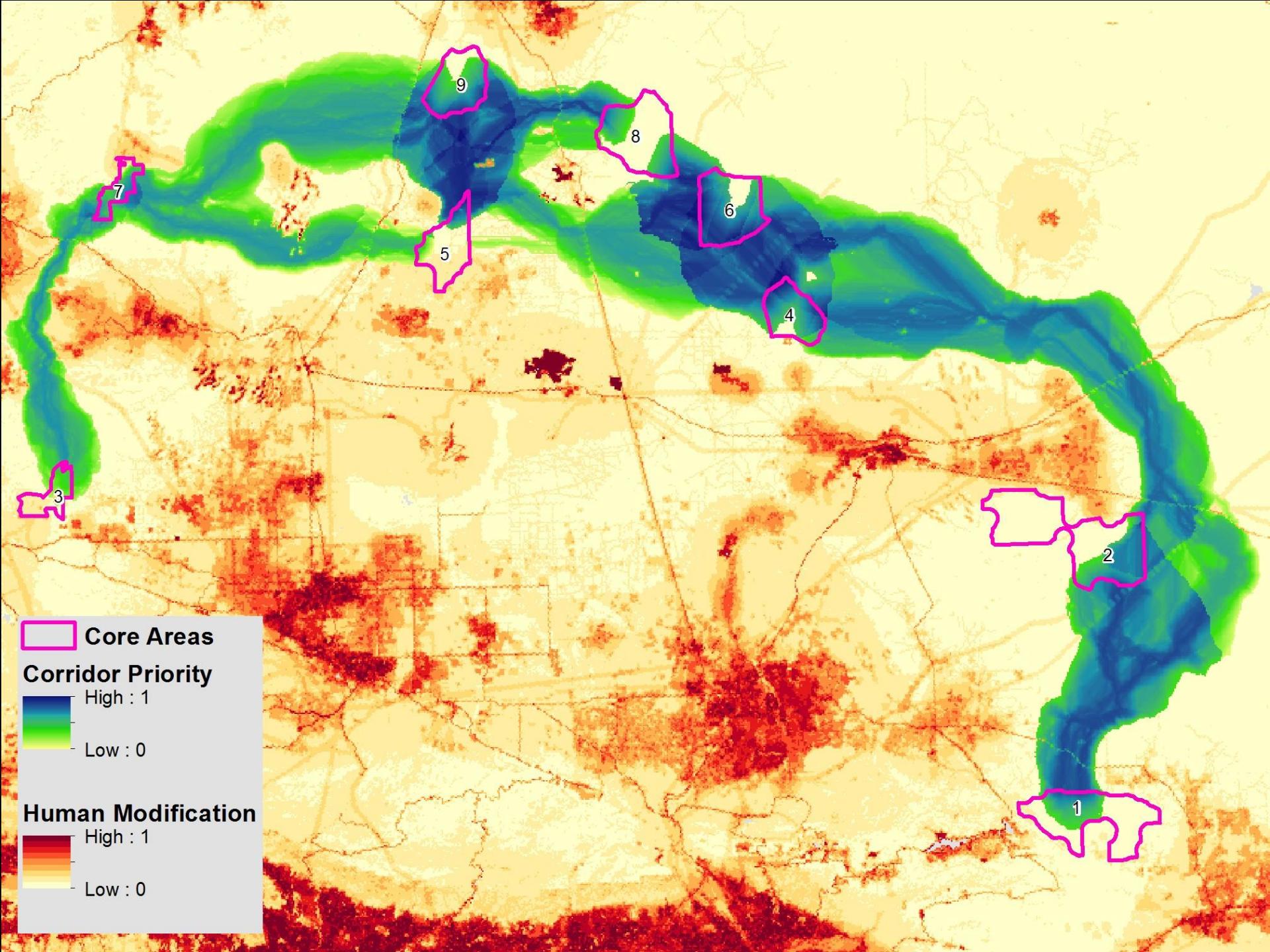
Linkage Mapper uses GIS maps of core habitat areas and resistances to identify and map linkages between core areas. Each cell in a resistance map is attributed with a value reflecting the energetic cost, difficulty, or mortality risk of moving across that cell. Resistance values are typically determined by cell characteristics, such as land cover or housing density, combined with species-specific landscape resistance models. As animals move away from specific core areas, cost-weighted distance analyses produce maps of total movement resistance accumulated.

The tool identifies adjacent (neighboring) core areas and create maps of least-cost corridors between them. It then mosaics the individual corridors to create a single composite corridor map. The result shows the relative value of each grid cell in providing connectivity between core areas, allowing users to identify which routes encounter more or fewer features that facilitate or impede movement between core areas. Linkage Mapper also produces vector layers that can be queried for corridor statistics.

The code is **optimized for ArcGIS 10.0**, but is also tested for ArcGIS 9.3, 10.1, and 10.2.

### Downloads

[Linkage Mapper 1.1.0](#)  
[Linkage Mapper Lab Exercise](#)



Core Areas

**Corridor Priority**

High : 1

Low : 0

**Human Modification**

High : 1

Low : 0

Randal's role: research and development of input datasets, modeling approaches and a series of conservation prioritization scenarios for the Boreal Plains econzone in western Canada

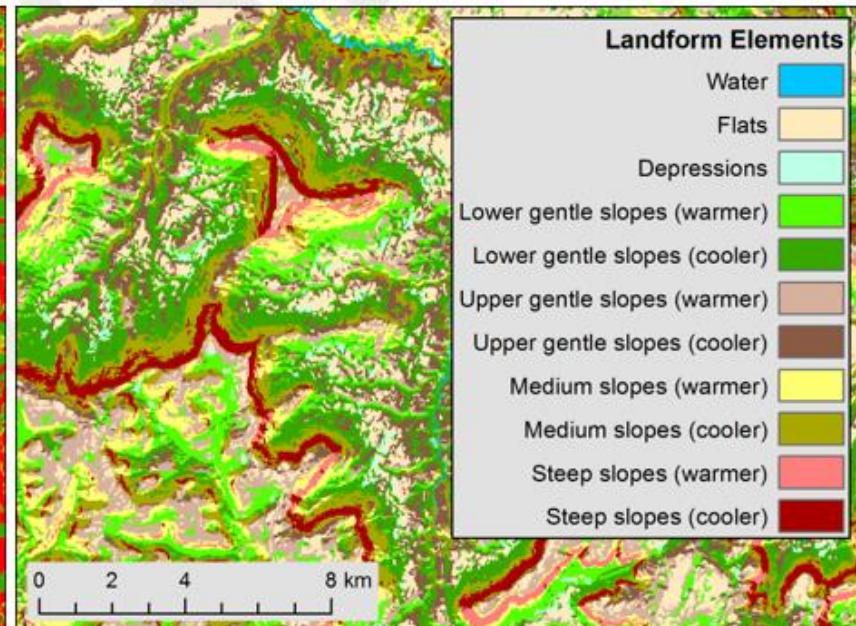
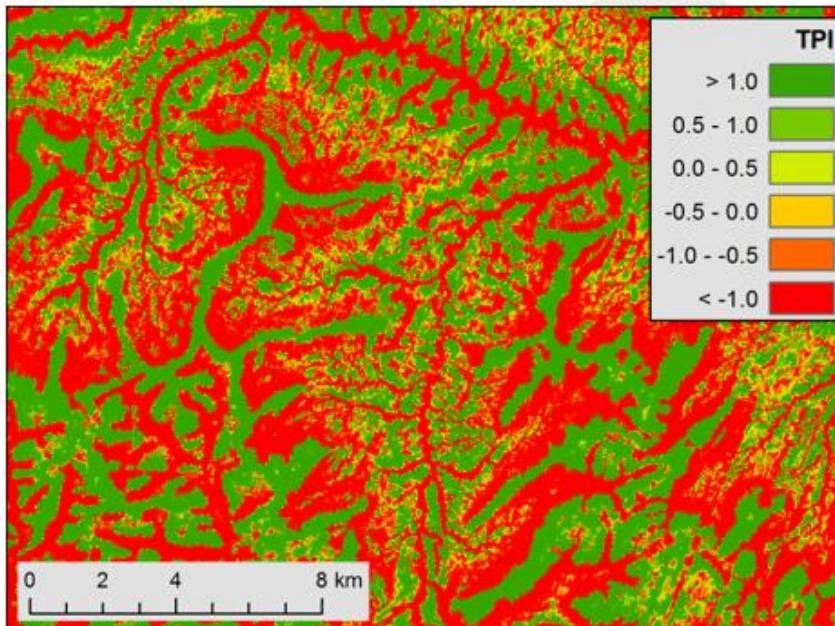
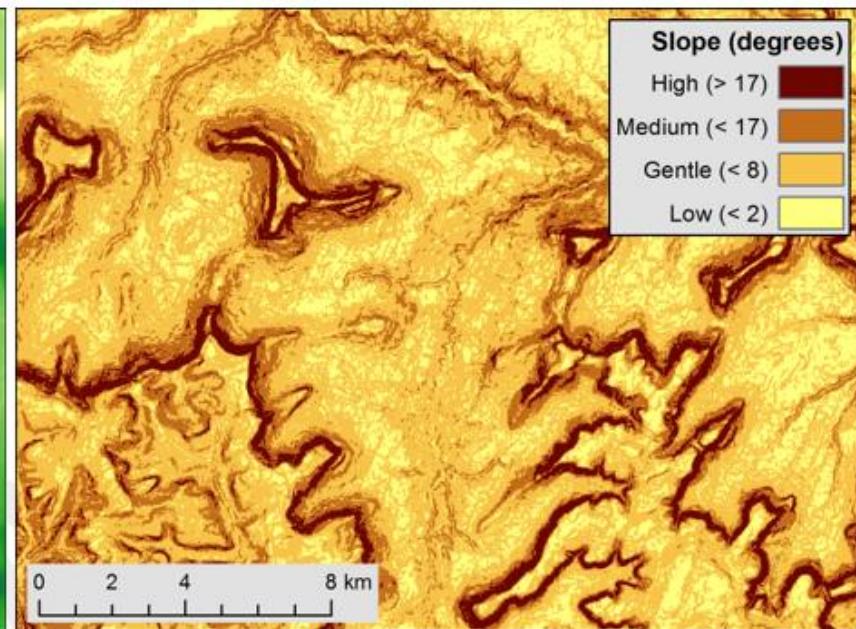
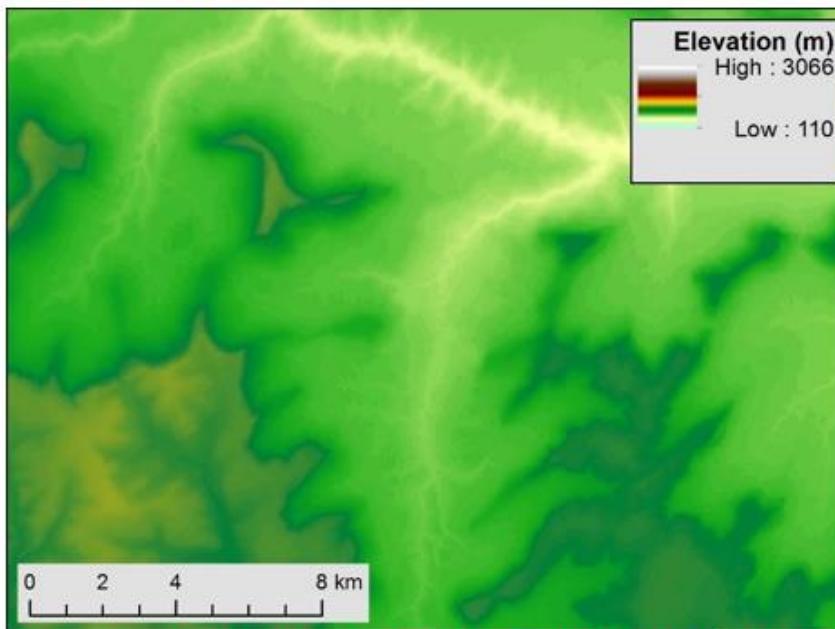
## Boreal Plains Conservation Atlas – DRAFT High Priority Areas Based on MARXAN Scenarios

Randal Greene, Feaver's Lane Enterprises Inc.

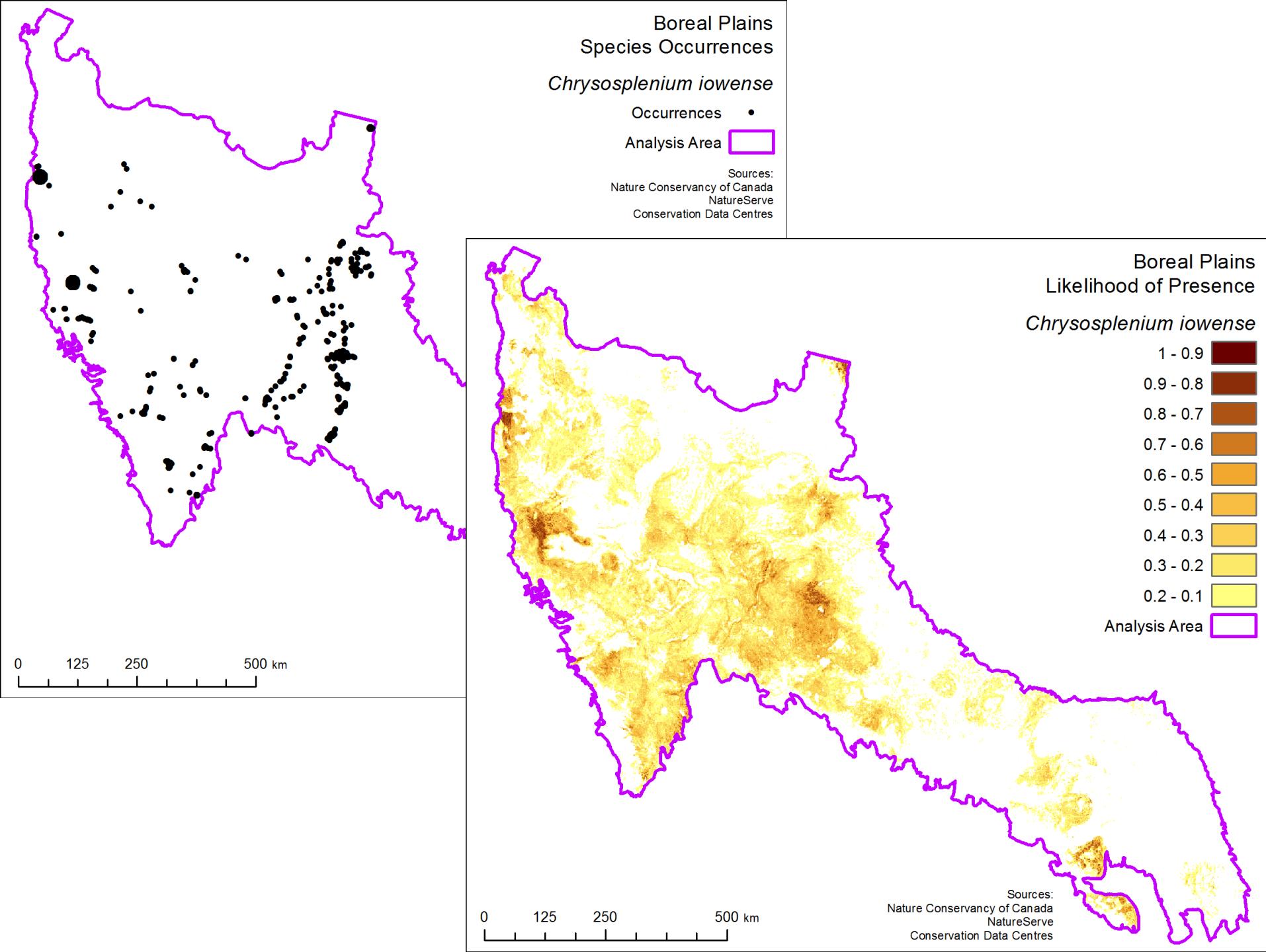
Christie Macdonald, Nature Conservancy of Canada



## Watershed A



Inputs and outputs for a selected area of Watershed A

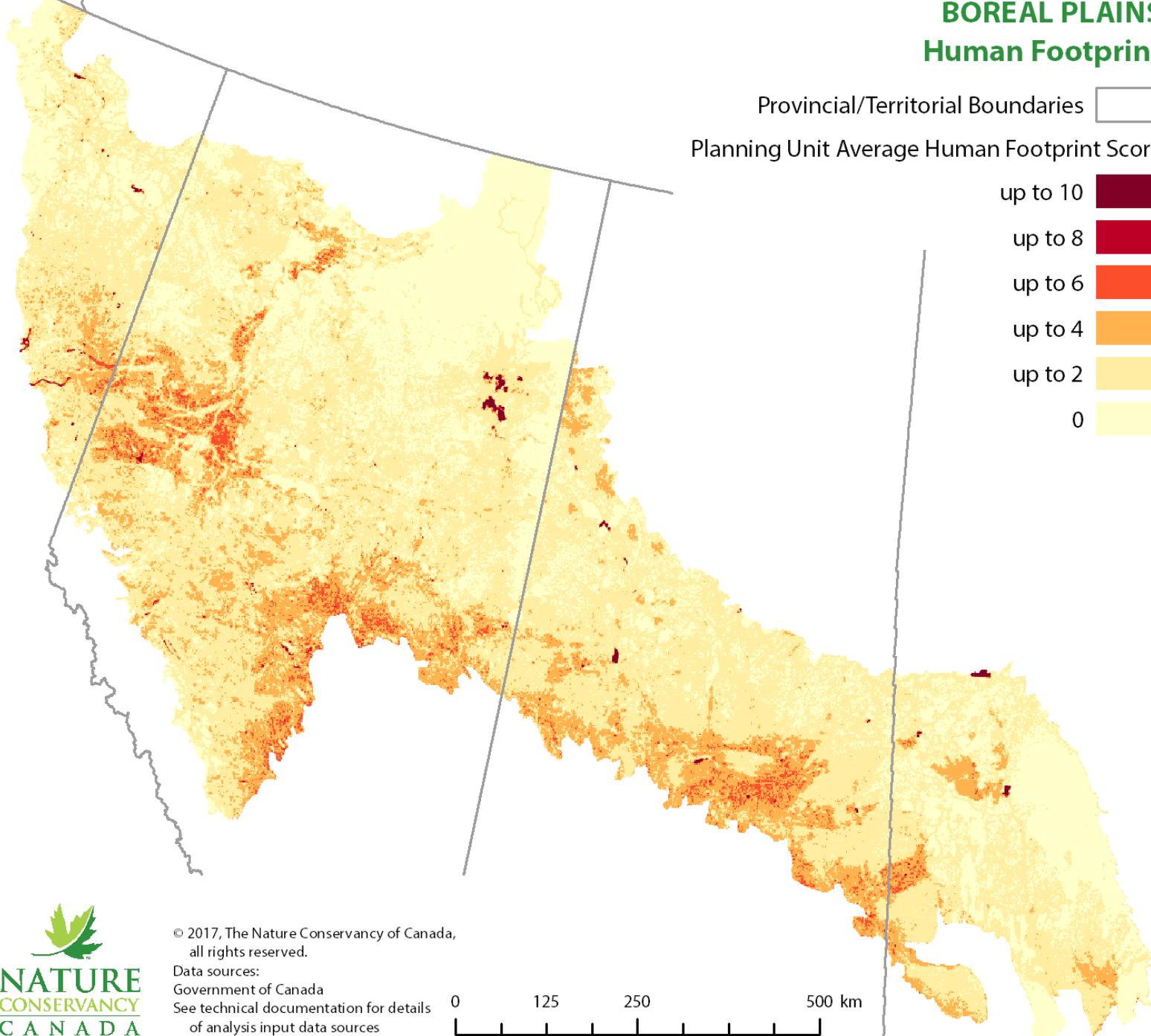
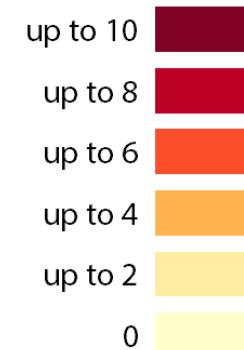


# BOREAL PLAINS Human Footprint

Provincial/Territorial Boundaries



Planning Unit Average Human Footprint Score



# BOREAL PLAINS

## Coarse-scale Conservation Prioritization

Provincial/Territorial Boundaries

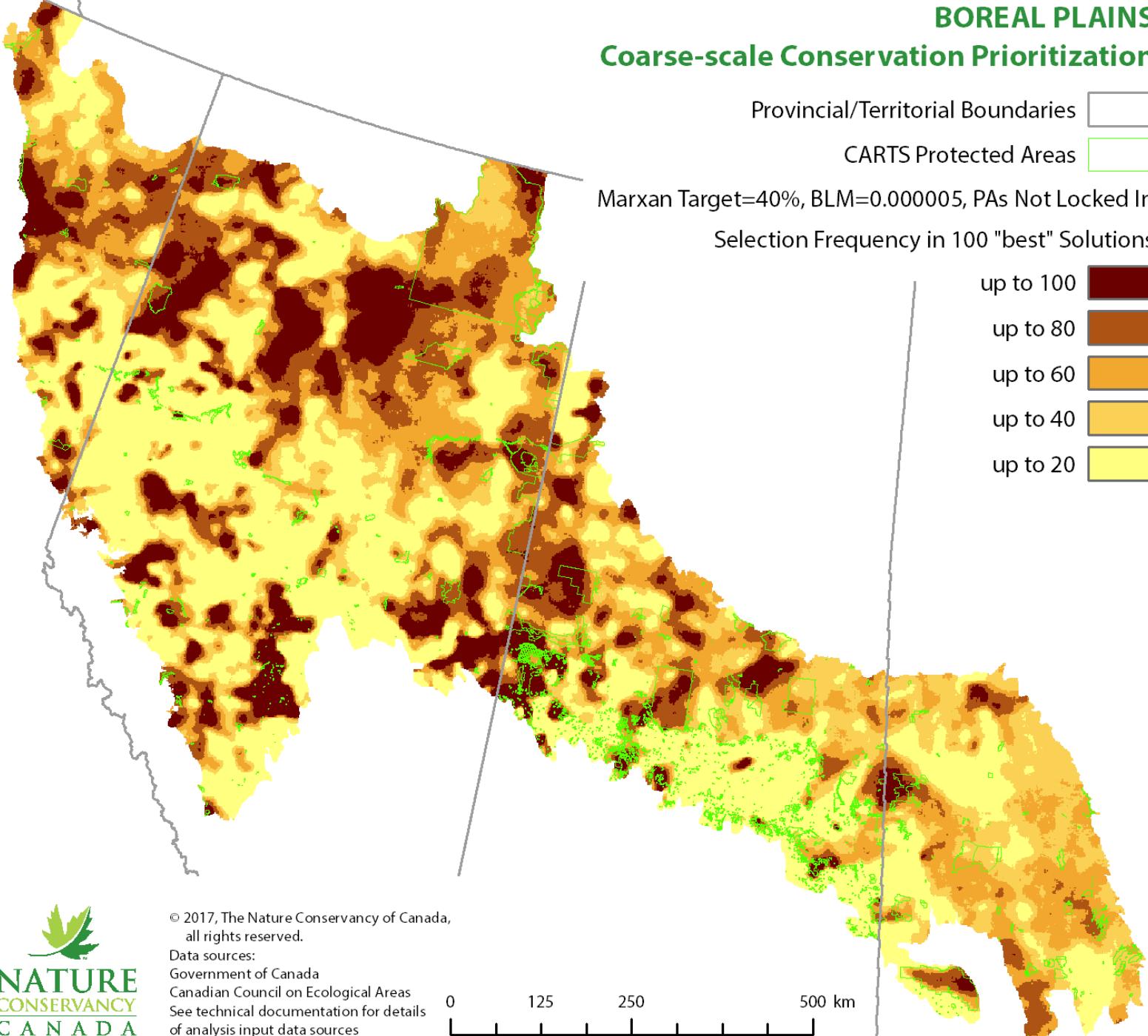
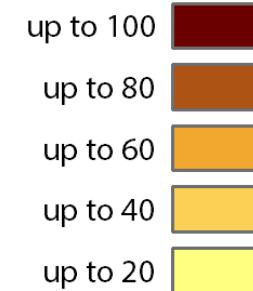


CARTS Protected Areas



Marxan Target=40%, BLM=0.000005, PAs Not Locked In

Selection Frequency in 100 "best" Solutions



© 2017, The Nature Conservancy of Canada,  
all rights reserved.

Data sources:

Government of Canada

Canadian Council on Ecological Areas

See technical documentation for details  
of analysis input data sources

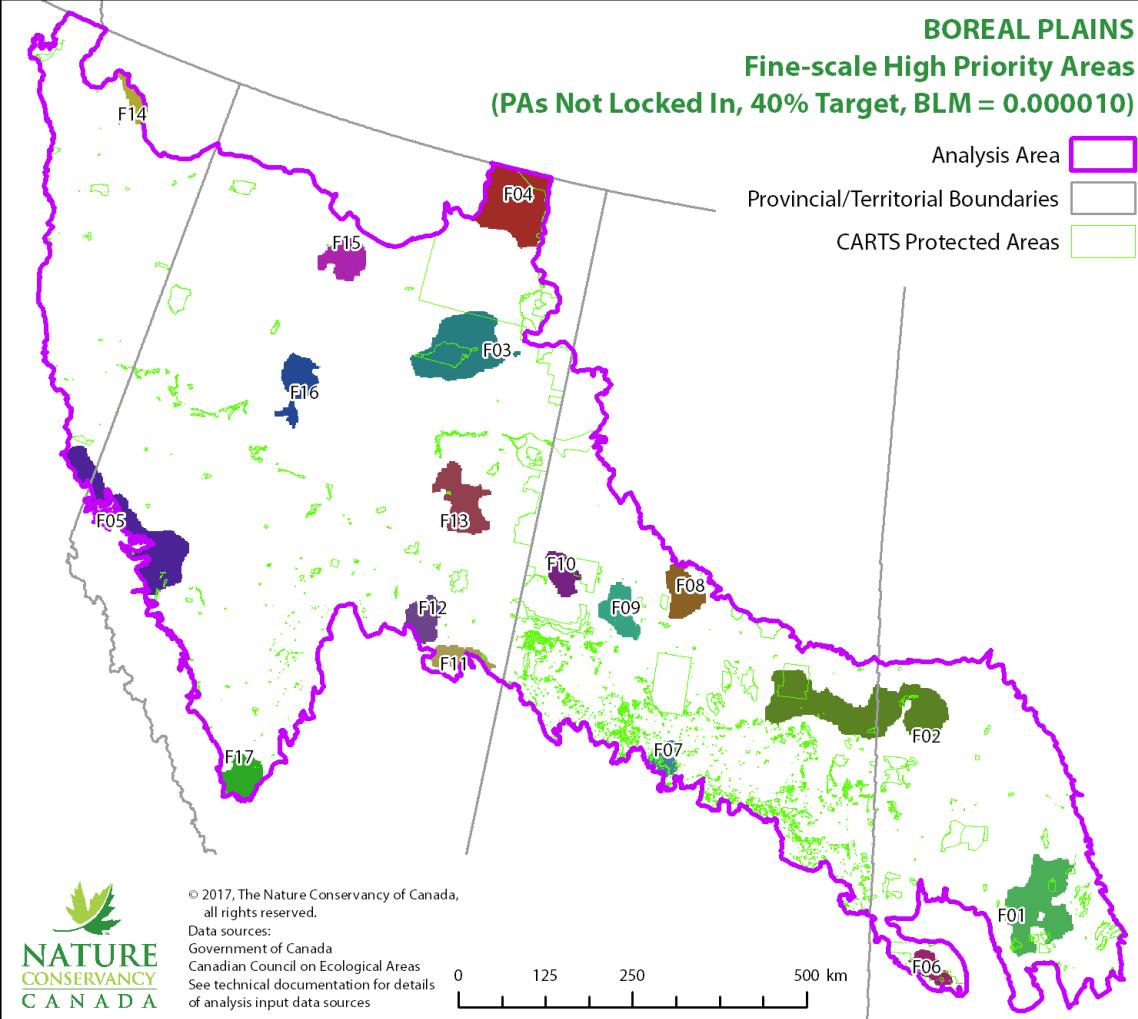
0 125 250 500 km

**BOREAL PLAINS**  
**Fine-scale High Priority Areas**  
**(PAs Not Locked In, 40% Target, BLM = 0.000010)**

Analysis Area

Provincial/Territorial Boundaries

CARTS Protected Areas



PriorityArea	Overall	PAs	F01	F02
<b>PU Count</b>	356742	31650 8.87%	3922 1.10%	6409 1.80%
<b>FINE-SCALE FEATURES (mean)</b>				
<b>MEAN_Ao</b>	0.02032	0.01996 98.24%	0.02950 145.17%	0.01809 89.02%
<b>MEAN_Cb</b>	0.12633	0.09174 72.62%	0.01460 11.56%	0.07211 57.08%
<b>MEAN_Am</b>	0.00881	0.01897 215.27%	0.00473 53.68%	0.00142 16.13%
<b>MEAN_Ab</b>	0.17757	0.08116 45.70%	0.00716 4.03%	0.01470 8.28%
<b>MEAN_Ca</b>	0.07576	0.09071 119.73%	0.07158 94.48%	0.21525 284.12%
<b>MEAN_Cv</b>	0.01065	0.01202 112.89%	0.00195 18.27%	0.00548 51.48%
<b>MEAN_Ci</b>	0.12746	0.09515 74.65%	0.03892 30.54%	0.04513 35.41%
<b>MEAN_Cypriat</b>	0.01199	0.00984 82.80%	0.14289 1202.68%	0.04264 267.34%