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Presentation to
NAWMP Plan Committee
11 August 2015

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Acknowledgements

Our Major Partners

- U.S. Fish and Wildlife Service
- North American Wetlands Conservation Council - NAWCA
- Canadian Federal departments
- State, Provincial, Territorial, 1st Nations Governments
- International Boreal Conservation Campaign
- PEW Charitable Trust
- Ducks Unlimited Inc. and DU Canada
- The Nature Conservancy
- National Wildlife Federation
- US Forest Service
- Other United States NGOs & Corporate Agencies
- NAWMP Plan Committee (1986 endorsement; ongoing support)
- >17,000 landowners

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Introduction of PHJV participants

- **PHJV Board Members:**
  - David Ingstrup, Lyle Saigeon, Scott Stephens
- **PHJV Science Committee Members:**
  - Bob Clark, Stuart Slattery, Jim Devries, Michael Barr, Stephen Carlyle, Corie White
- **PHJV Policy Committee Members:**
  - Pete Joyce, Hugh Hunt
- **Associates/Program Staff:**
  - Mike Anderson, Dean Smith, Katherine Conkin, Etienne Soloudre, John Trevor, Cameron Wood
- **Coordinator:** Deanna Dixon

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Today's Presentation

- Introduction, David Ingstrup
- Prairie Parkland/Western Boreal Flight, Michael Barr
- PHJV's New Implementation Plan 2013-2020
  - Western Boreal Forest, Stuart Slattery
  - Prairie Parkland, Jim Devries & Peter Joyce
- Wrap Up, Bob Clark

Alignment with NAWMP Revision 2012.
Focus is on key issues and what's new!

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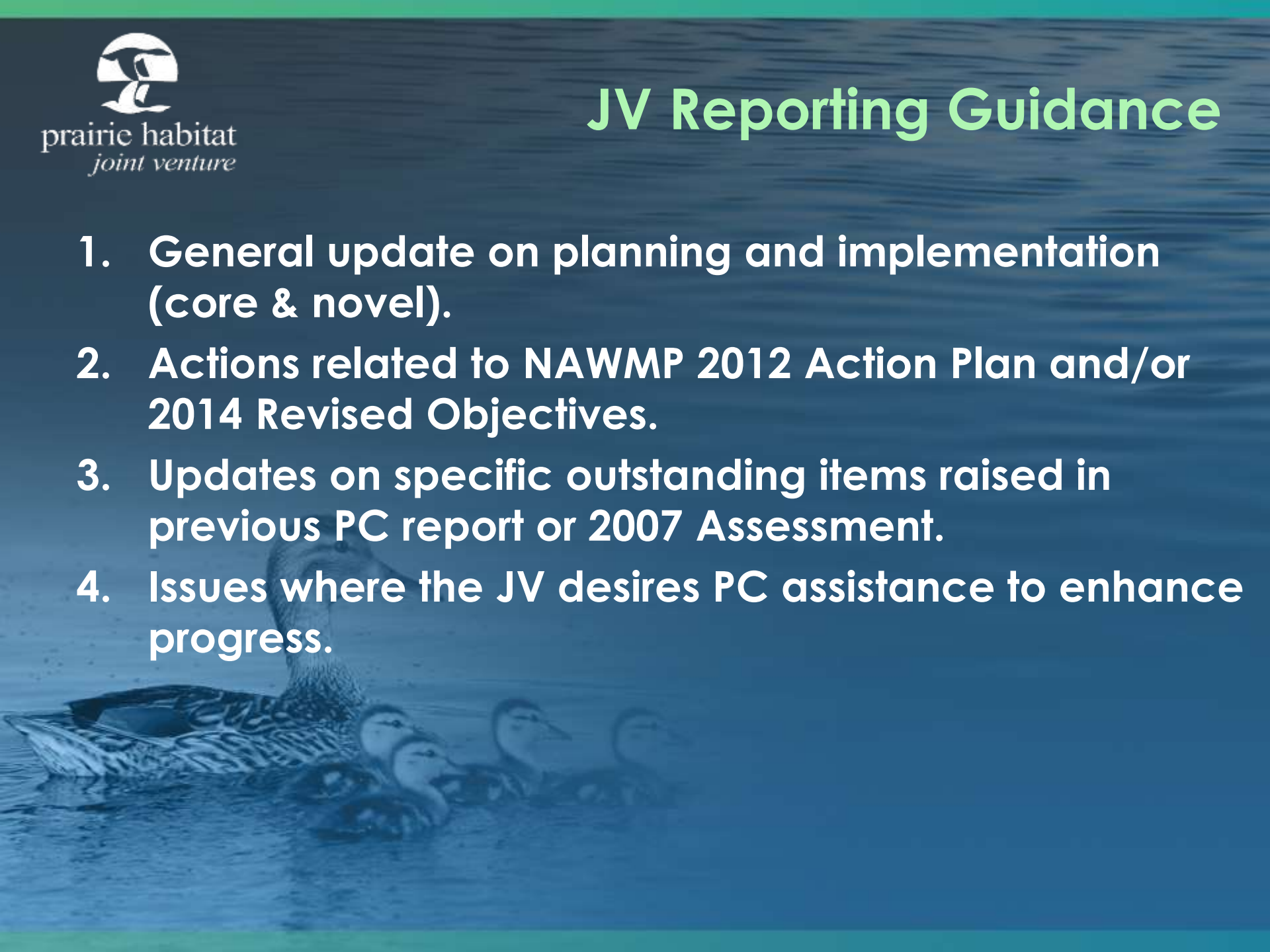
JV Reporting Guidance

1. General update on planning and implementation (core & novel).
2. Actions related to NAWMP 2012 Action Plan and/or 2014 Revised Objectives.
3. Updates on specific outstanding items raised in previous PC report or 2007 Assessment.
4. Issues where the JV desires PC assistance to enhance progress.



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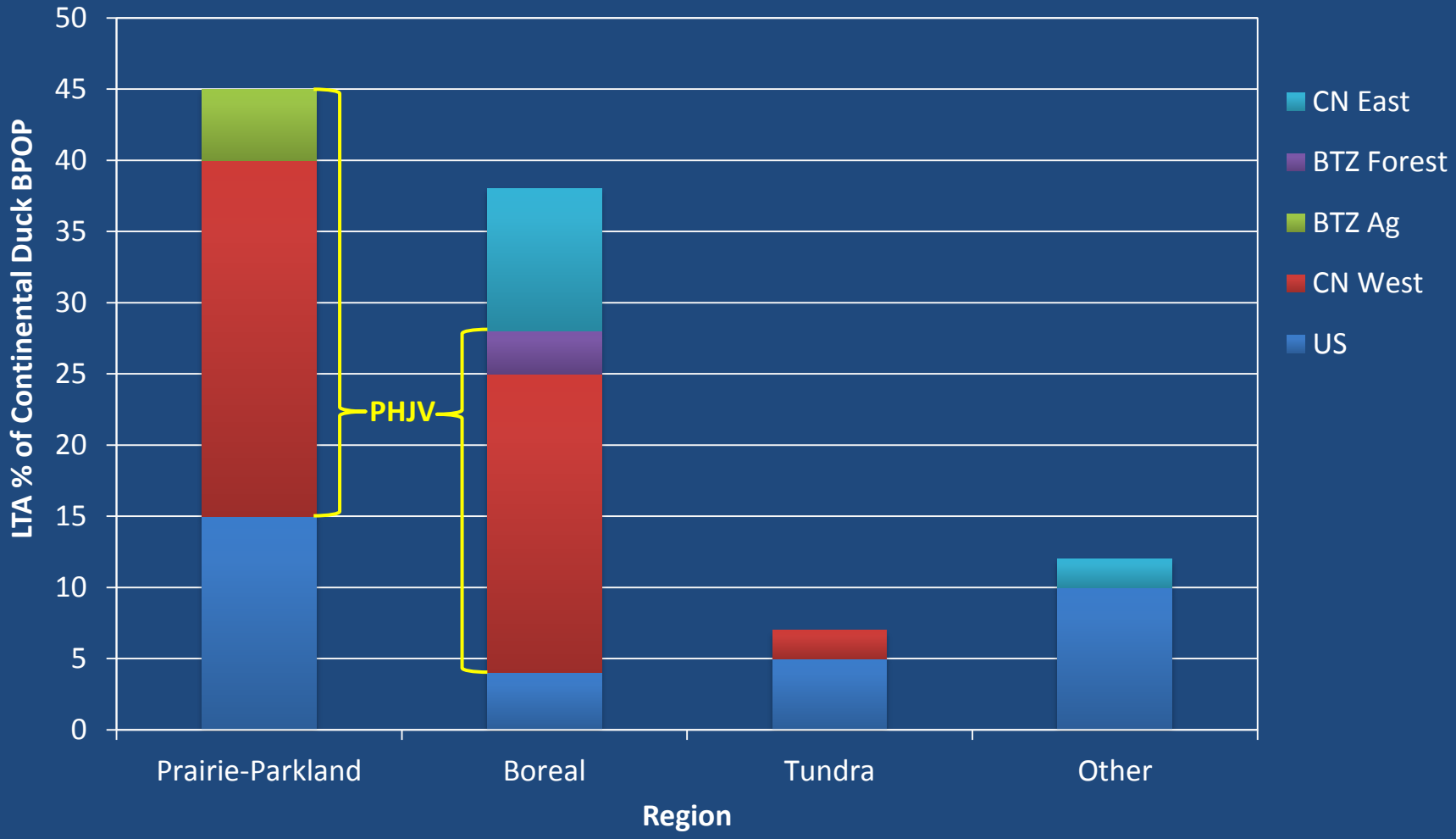
PHJV overview

“Continental” Duck Distribution



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PHJV Overview

- 70% of total ducks annually surveyed are recorded in the Prairie-Parkland Region and Western Boreal Forest area of Canada

- Some of best waterfowl habitat in NA

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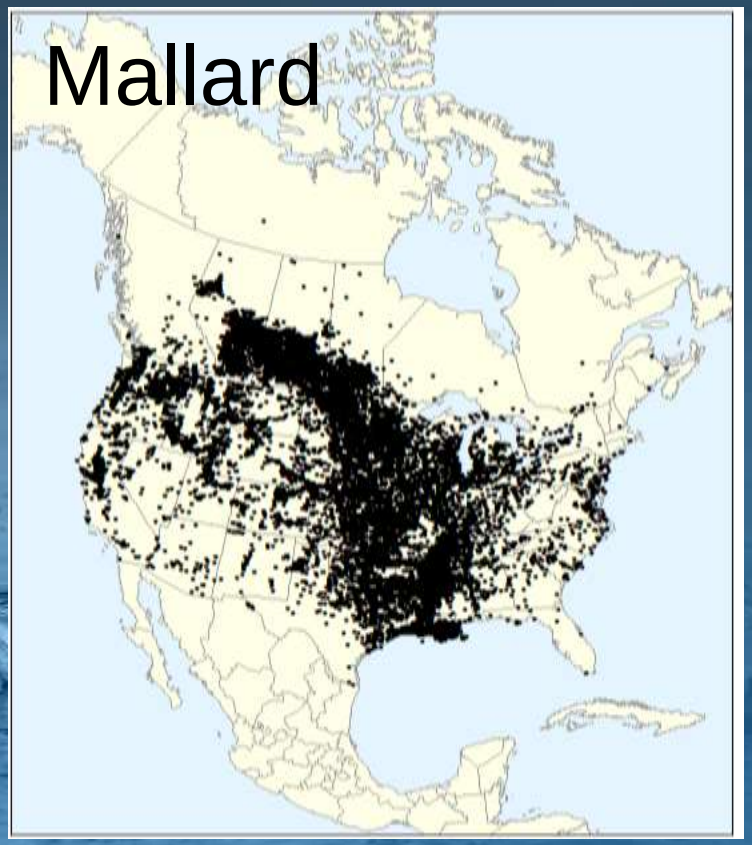
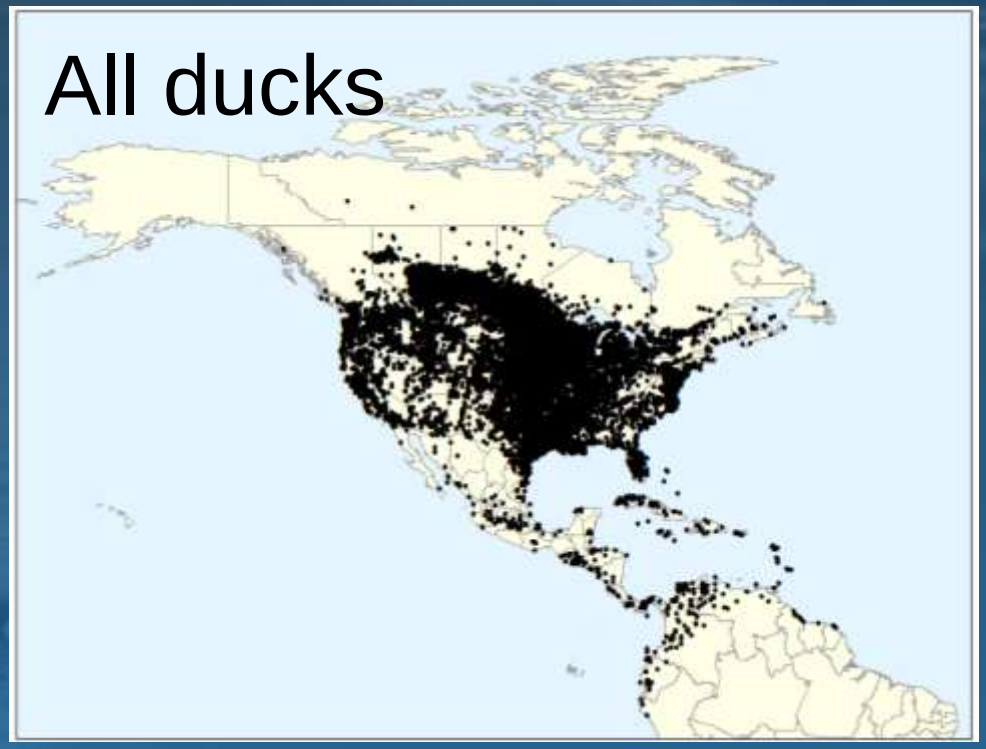
Direct recoveries of mallards and all ducks banded in the Prairie-Parkland area





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PHJV Overview

- Issue: Habitats lost to agriculture intensification
  - Conversion of native prairie and loss of wetlands further reduce carrying capacity for ducks and many other bird species.
- Issue: Industrial expansion and climate change in the WBF.
- But, on the positive side:
  - Wetland policy implementation (AB) or planning (MB,SK) are advancing.
  - Increasing pressure to sustain grasslands as a resilient multifunctional grazing resource (i.e., beef industry) and for Species at Risk

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PHJV Population Goals

2007-2012	2013-2020
Sustain average population levels of the 1970s	*Duck populations are maintained at average levels recorded during 1955-2014, recognizing that abundance and species composition will fluctuate in response to variable pond and upland habitat conditions.*
Set population objectives for priority species of landbirds, shorebirds, and waterbirds	*Goals for other bird species are aligned with those specified in Bird Conservation region Plans and Recovery Plans for Species at Risk*

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PHJV Habitat Goals

2007-2012	2013-2020
• Stop further wetland loss • Stop further loss of native lands, especially native grasslands • Restore lost wetlands, especially small basins • Set habitat objectives for priority species of waterfowl, landbirds, shorebirds, and waterbirds	*The Prairie Parkland Region and Western Boreal Forest are capable of sustaining duck populations at levels recorded during 1955-2014, including populations in years of peak abundances, by maintaining the PHJV's carrying capacity (wetlands support breeding pairs; reproductive and survival rates allow population growth). Identify and pursue opportunities to retain and restore key habitats for non-waterfowl species.*

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PHJV People Goals

2007-2012	2013-2020
• While goals were not explicit, programs and policies have been delivered and advocated that favour both conservation and long-term sustainability of rural communities. • Benefits and values to society were implicit (i.e., assumed).	*Going forward, explicit goals will be developed to enhance opportunities for more people to hunt and view waterfowl, while building support for wetland conservation among a wider community including the general public.*

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Biological and Socio-Economic Foundations

- PHJV has a diverse portfolio of science investments – reflects commitment to strategic research to ensure effective conservation
- Results of research guide and adapt programs, continually improve performance, provide maximum benefits to NAWMP.
- Research in socio-economics and evaluation of broad habitat benefits are also important to guide program and policy decisions, in terms of
  - Hunting traditions, and
  - Getting more people from all sectors excited about wetlands & habitat, and more actively engaged in conservation

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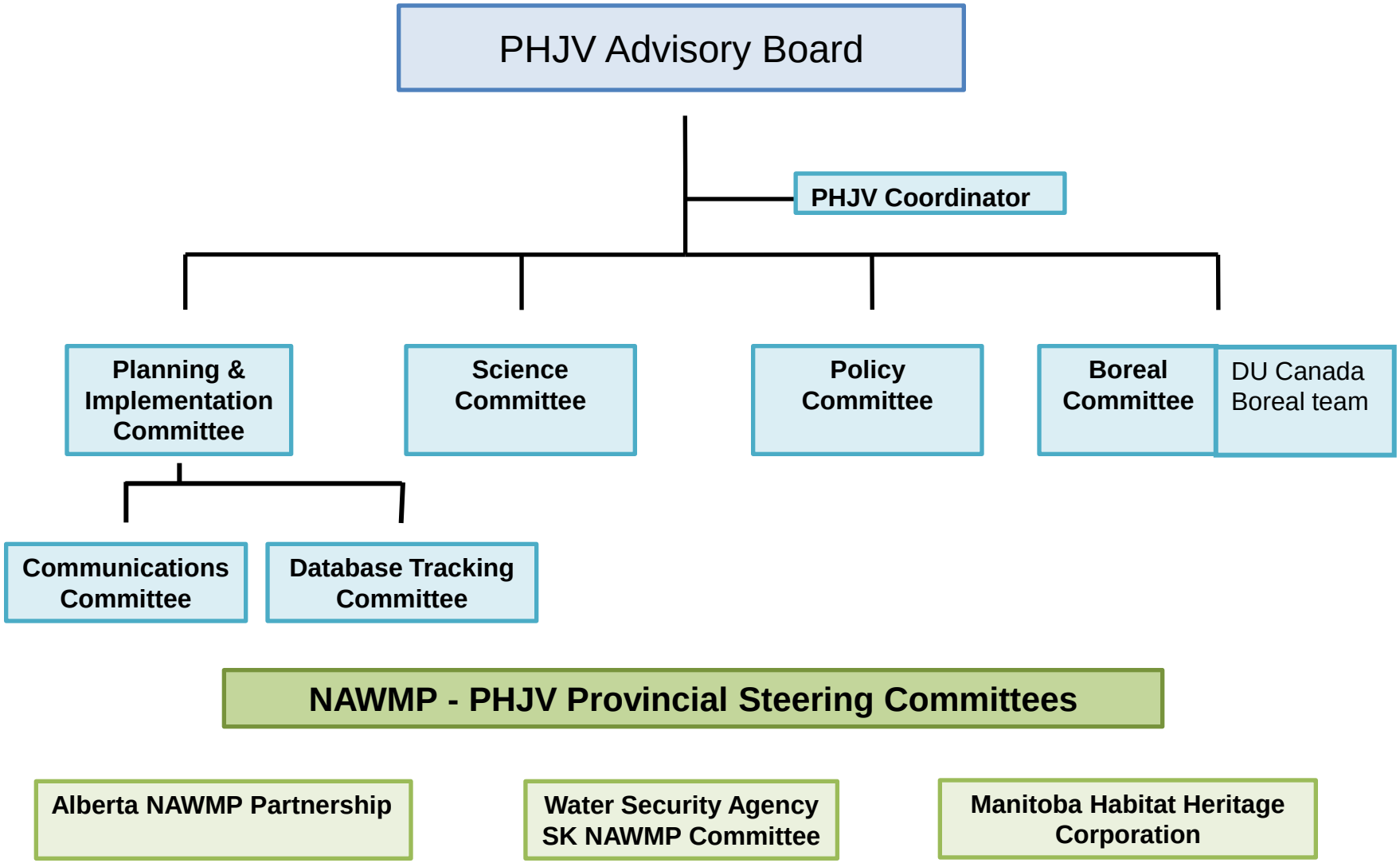
PHJV Organization

- Environment Canada (Canadian Wildlife Service)
- Alberta Environment and Parks
- Alberta NAWMP Partnership
- Saskatchewan Ministry of Environment
- Saskatchewan Water Security Agency
- Manitoba Conservation
- Manitoba Habitat Heritage Corporation
- Ducks Unlimited Canada
- Nature Conservancy of Canada
- Wildlife Habitat Canada
- Bird Studies Canada


PHJV Advisory Board
PHJV Coordinator
Planning & Implementation Committee
Science Committee
Policy Committee
Boreal Committee
DU Canada Boreal team
Communications Committee
Database Tracking Committee
NAWMP - PHJV Provincial Steering Committees
Alberta NAWMP Partnership
Water Security Agency SK NAWMP Committee
Manitoba Habitat Heritage Corporation

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Questions?

Questions about the PHJV organization and general regional issues?



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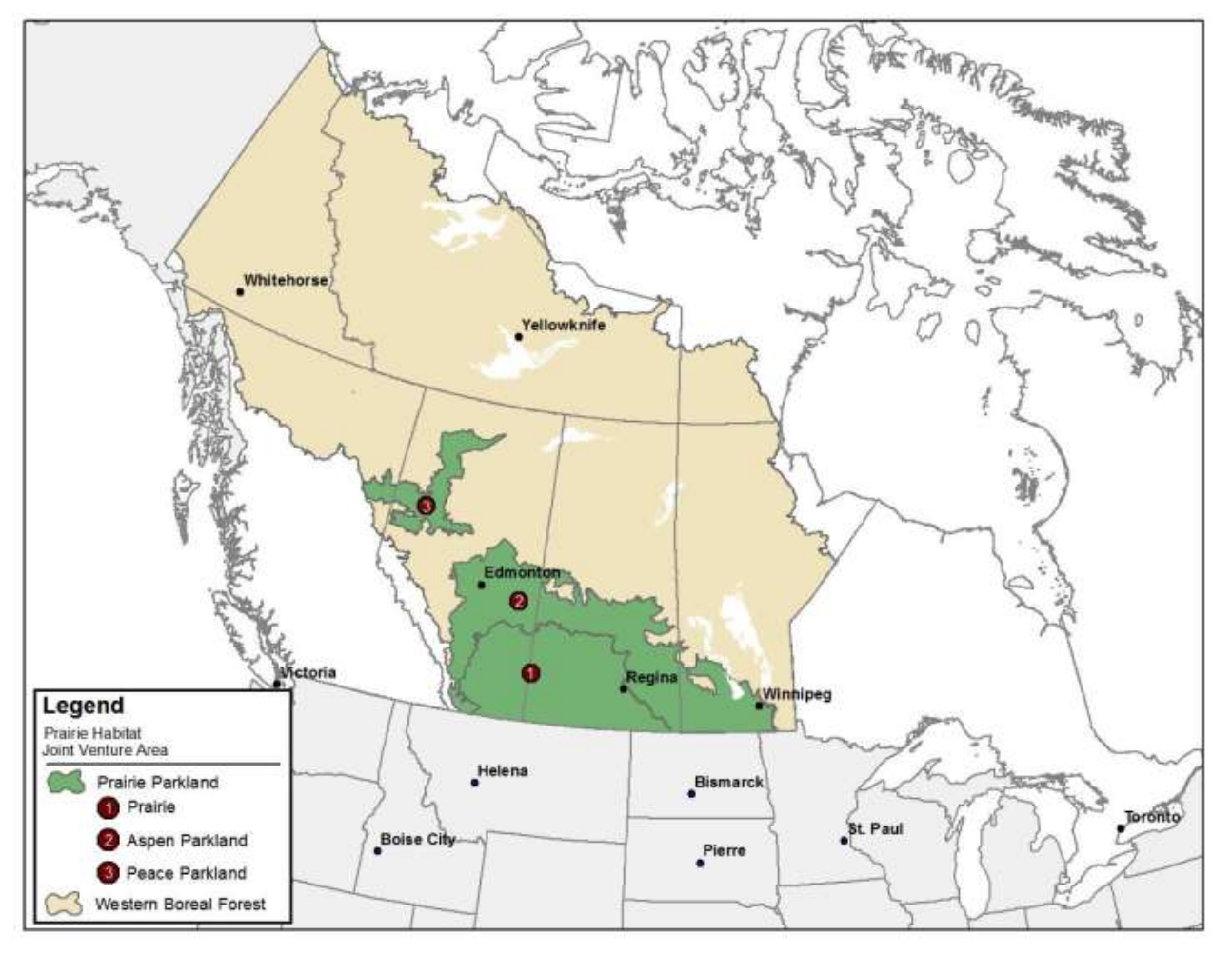
Prairie Parkland / Western Boreal Flight
Michael Barr, AB NAWMP Coordinator



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… from Winnipeg
… to Inuvik.

Fasten your seat belts!

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Stuart Slattery

PHJV Science Committee &
PHJV Boreal Committee
Ducks Unlimited Canada

PRAIRIE HABITAT JOINT VENTURE: THE WESTERN BOREAL FOREST

IMPLEMENTATION PLAN 2013-2020

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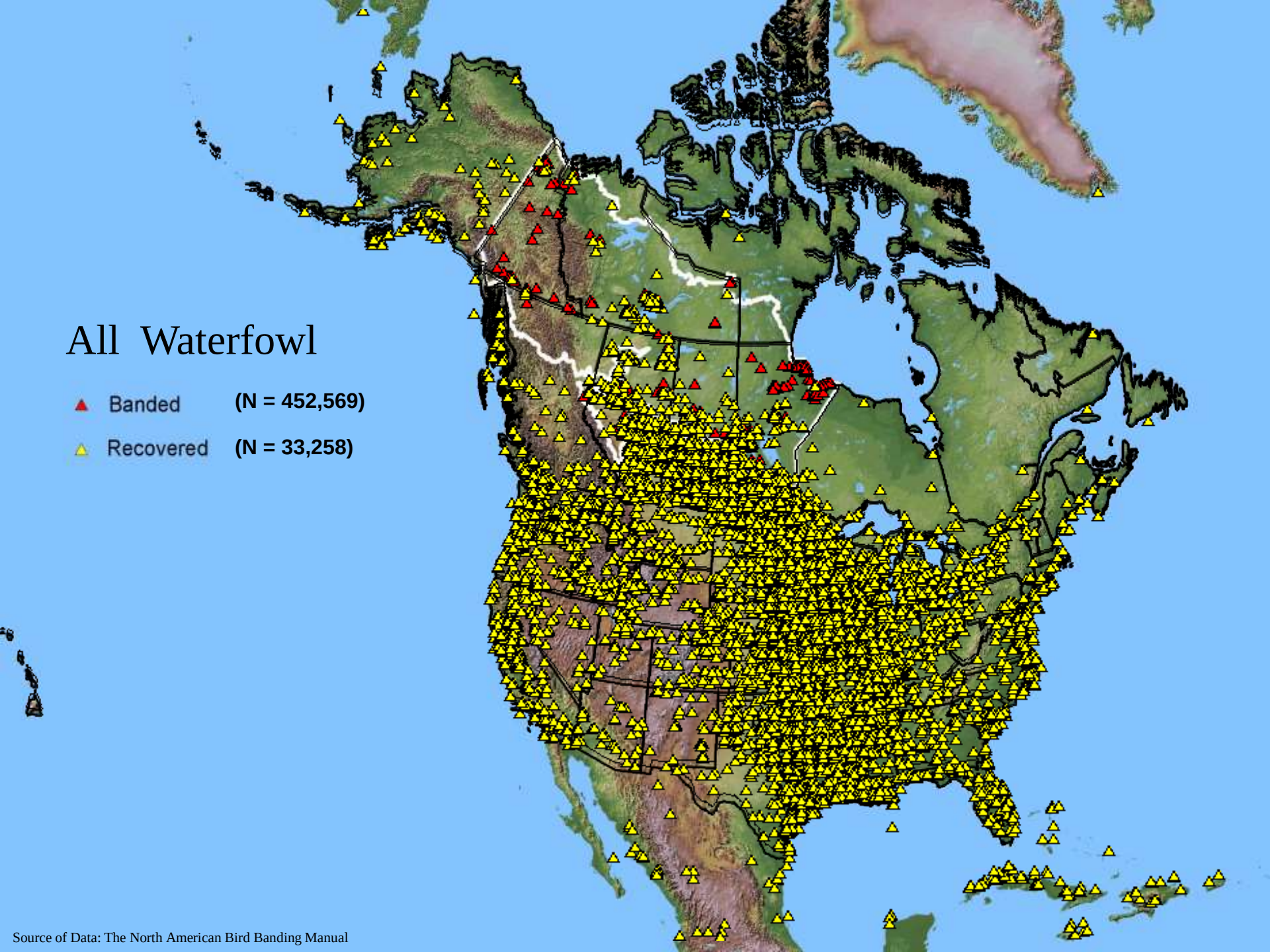
PHJV Region



Source of Data: The North American Bird Banding Manual

Cumulative Impacts

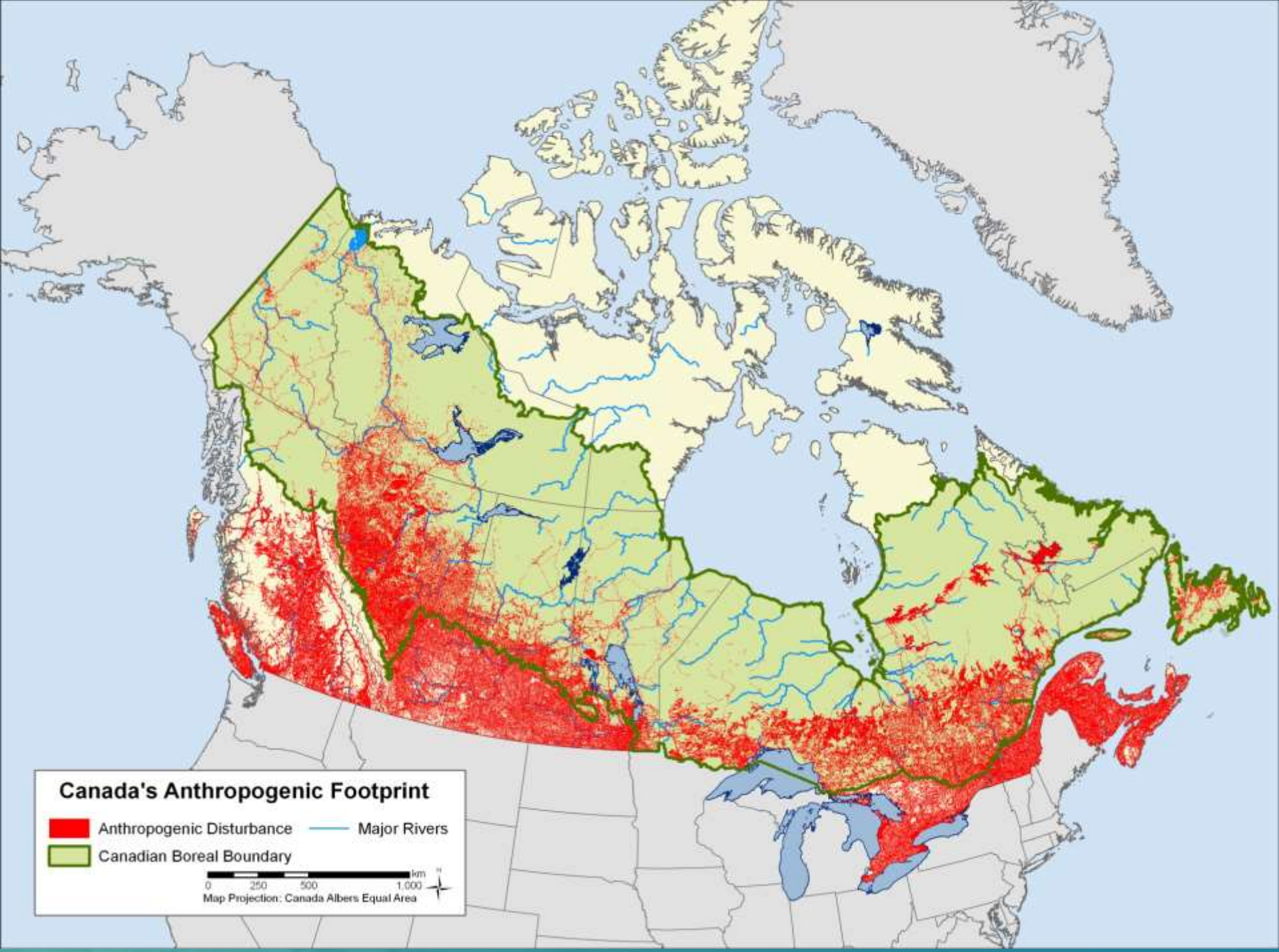
Fire Scars

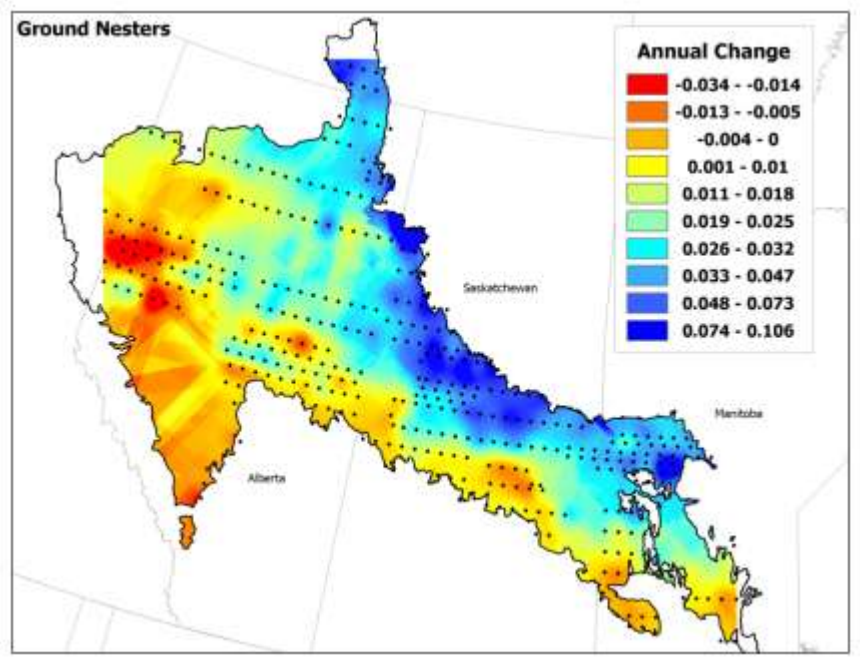
Cutblocks

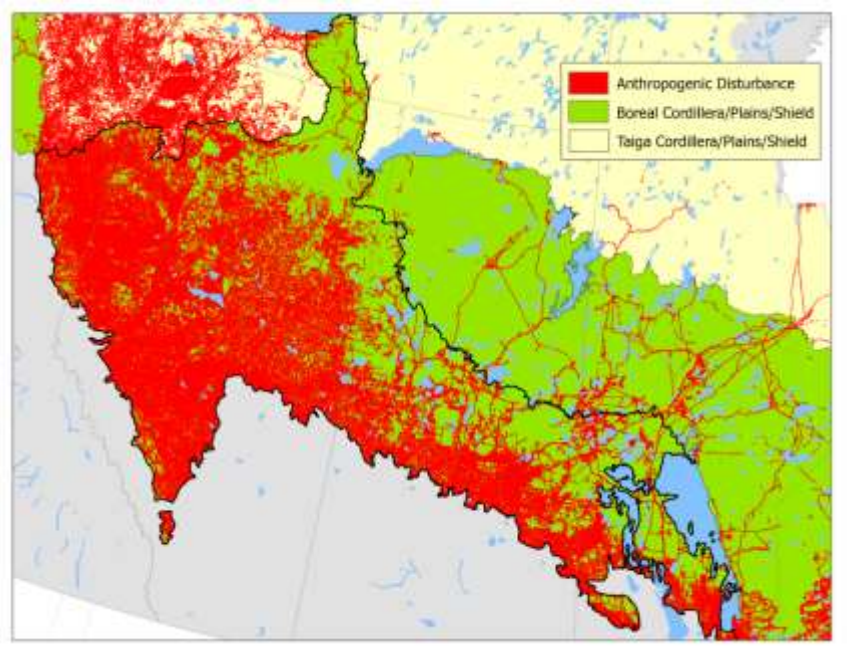
Oil/Gas Infrastructure

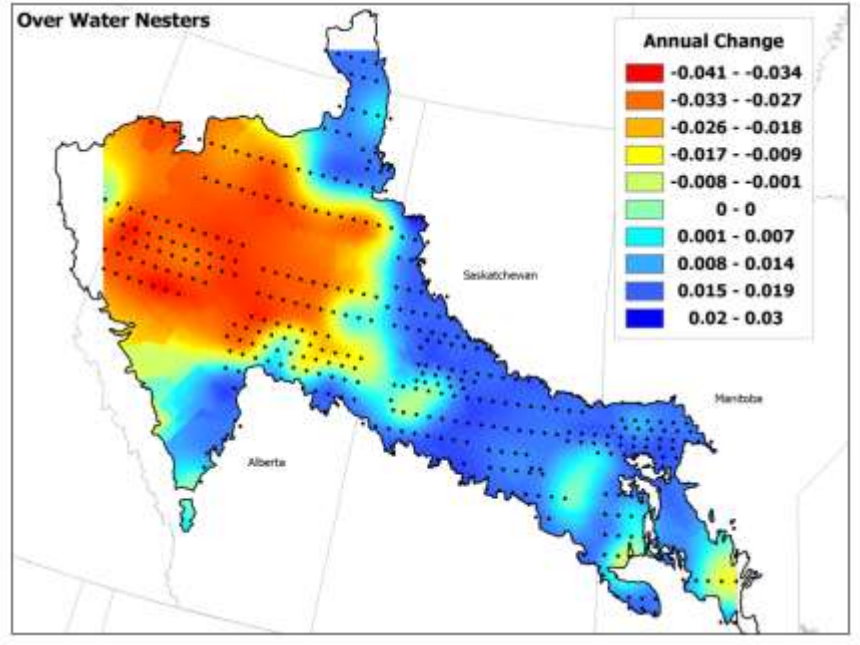
Roads

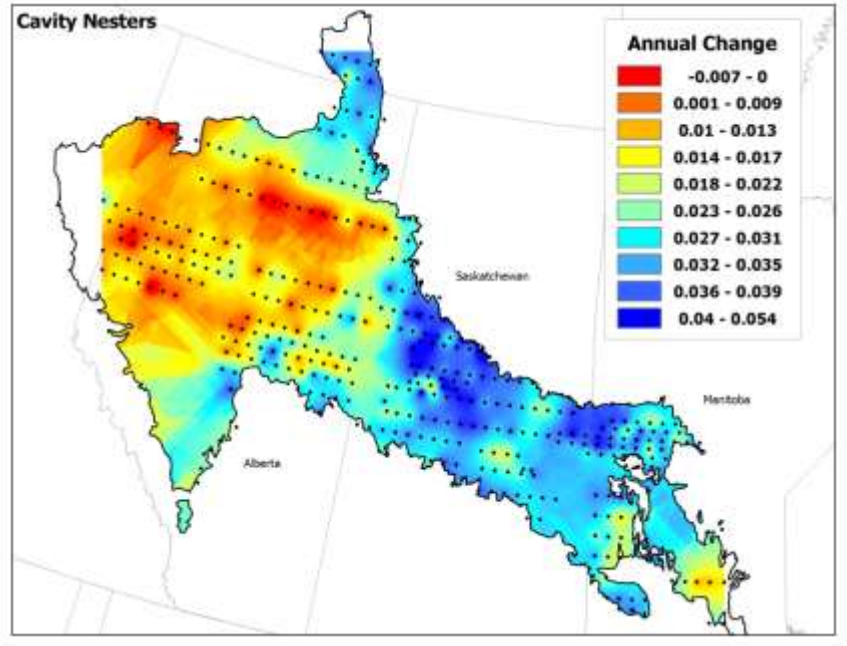
Boreal Forest Near Whitecourt, Alberta


Canada's Anthropogenic Footprint
Anthropogenic Disturbance
Major Rivers
Canadian Boreal Boundary
km
0
250
500
1,000
N
Map Projection: Canada Albers Equal Area

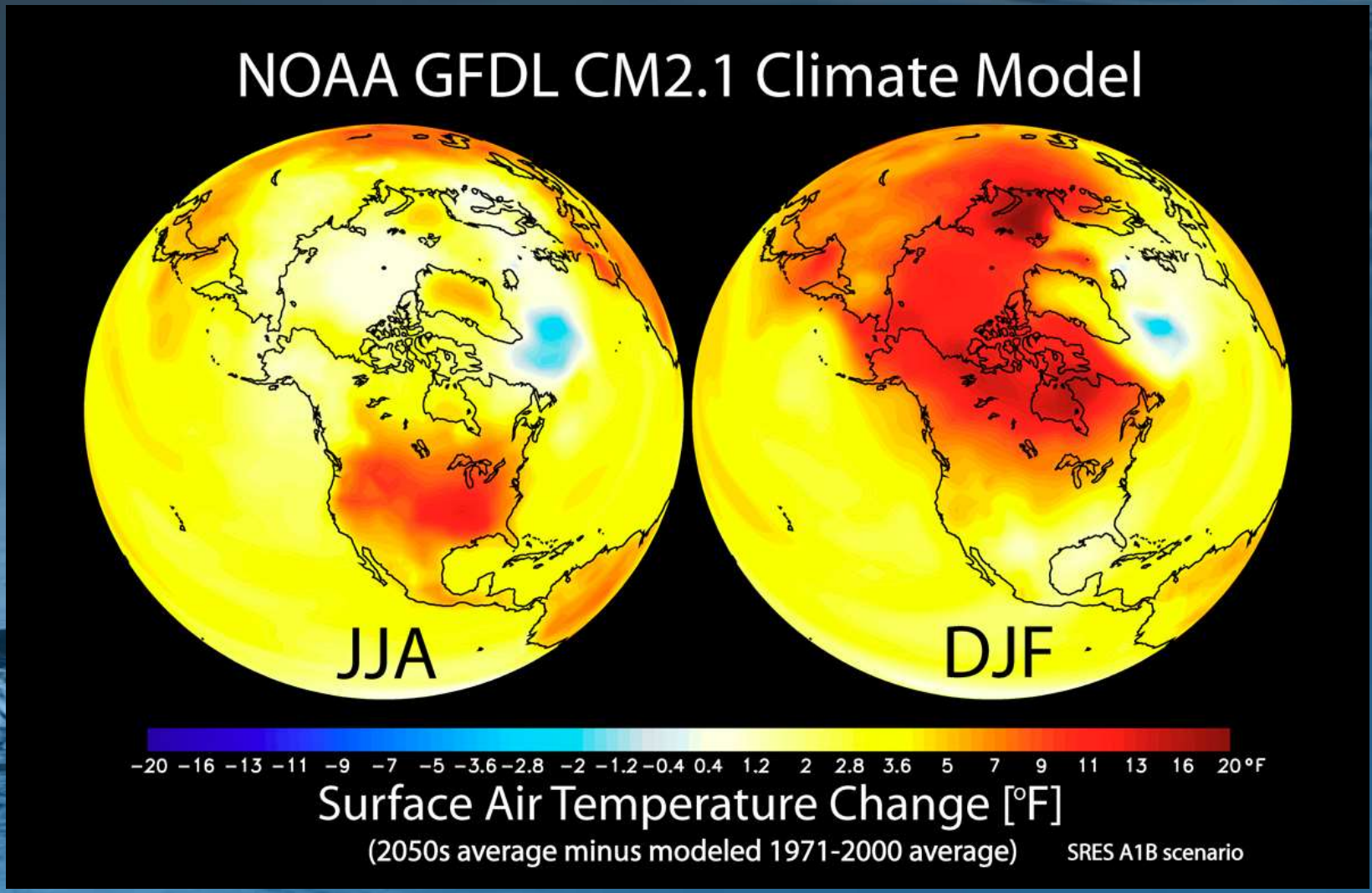

Ground Nesters
Annual Change
-0.034 - -0.014
-0.013 - -0.005
-0.004 - 0
0.001 - 0.01
0.011 - 0.018
0.019 - 0.025
0.026 - 0.032
0.033 - 0.047
0.048 - 0.073
0.074 - 0.106
Saskatchewan
Manitoba
Alberta


Anthropogenic Disturbance
Boreal Cordillera/Plains/Shield
Taiga Cordillera/Plains/Shield


Over Water Nesters
Annual Change
-0.041 - -0.034
-0.033 - -0.027
-0.026 - -0.018
-0.017 - -0.009
-0.008 - -0.001
0 - 0
0.001 - 0.007
0.008 - 0.014
0.015 - 0.019
0.02 - 0.03
Saskatchewan
Manitoba
Alberta


Cavity Nesters
Annual Change
-0.007 - 0
0.001 - 0.009
0.01 - 0.013
0.014 - 0.017
0.018 - 0.022
0.023 - 0.026
0.027 - 0.031
0.032 - 0.035
0.036 - 0.039
0.04 - 0.054
Saskatchewan
Manitoba
Alberta

Climate Change



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Western Boreal Forest Goals

- *Bird Goals*
- Sustain waterfowl populations at 1955-2014 averages
- Sustain populations of other wetland-dependent birds

- *Habitat Goals*
- Retain current biological function of wetlands and associated uplands
- Set habitat objectives for priority species of waterfowl and other wetland-dependent birds

- *Human Dimension Goals*
- Work with northern communities, provincial and federal agencies, industry and other habitat beneficiaries to set and achieve shared conservation goals
- Grow support for boreal waterfowl and non-game bird conservation

Bird Goals: Duck Status

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Species	Long-term average (1955-2014)	Long-term 80th percentile	% difference from long-term average	% difference from LT 80th percentile
Mallard	2,627,617	3,056,214	-16	-27
Green-winged Teal	1,100,561	1,335,502	40	15
American Wigeon	1,202,099	1,506,776	-20	-36
Dabbling ducks	*4,930,277*	*5,534,004*	*-4*	*-15*
Scaup	2,984,904	3,549,502	-26	-38
Ring-necked duck	522,721	675,339	49	15
Bufflehead	627,768	877,983	53	10
Scoter	825,877	1,104,645	-23	-42
Goldeneye	380,980	524,070	45	6
Canvasback	207,937	245,783	4	12
Diving ducks	*5,550,187*	*6,101,073*	*-4*	*-12*
All ducks	*10,480,464*	*11,647,222*	*-4*	*-14*

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Bird Goals: Non-Game Status

- 57 priority species of wetland associated shore, water, or land birds; 30 are boreal specialists
- About 40% are thought to have negative population trends, e.g., Rusty Blackbird 88% decline.
- 9 wetland-associated species are listed as Species at Risk

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Habitat Goals: Landscape Condition

- Agricultural conversion 3x higher than global average (1966 – 1994)
- Industrial footprint estimated at 87M acres (12% of land area)
- Evidence of climate change impacts

- 52% of the land base is >80% intact
- Remainder considered the "working forest"

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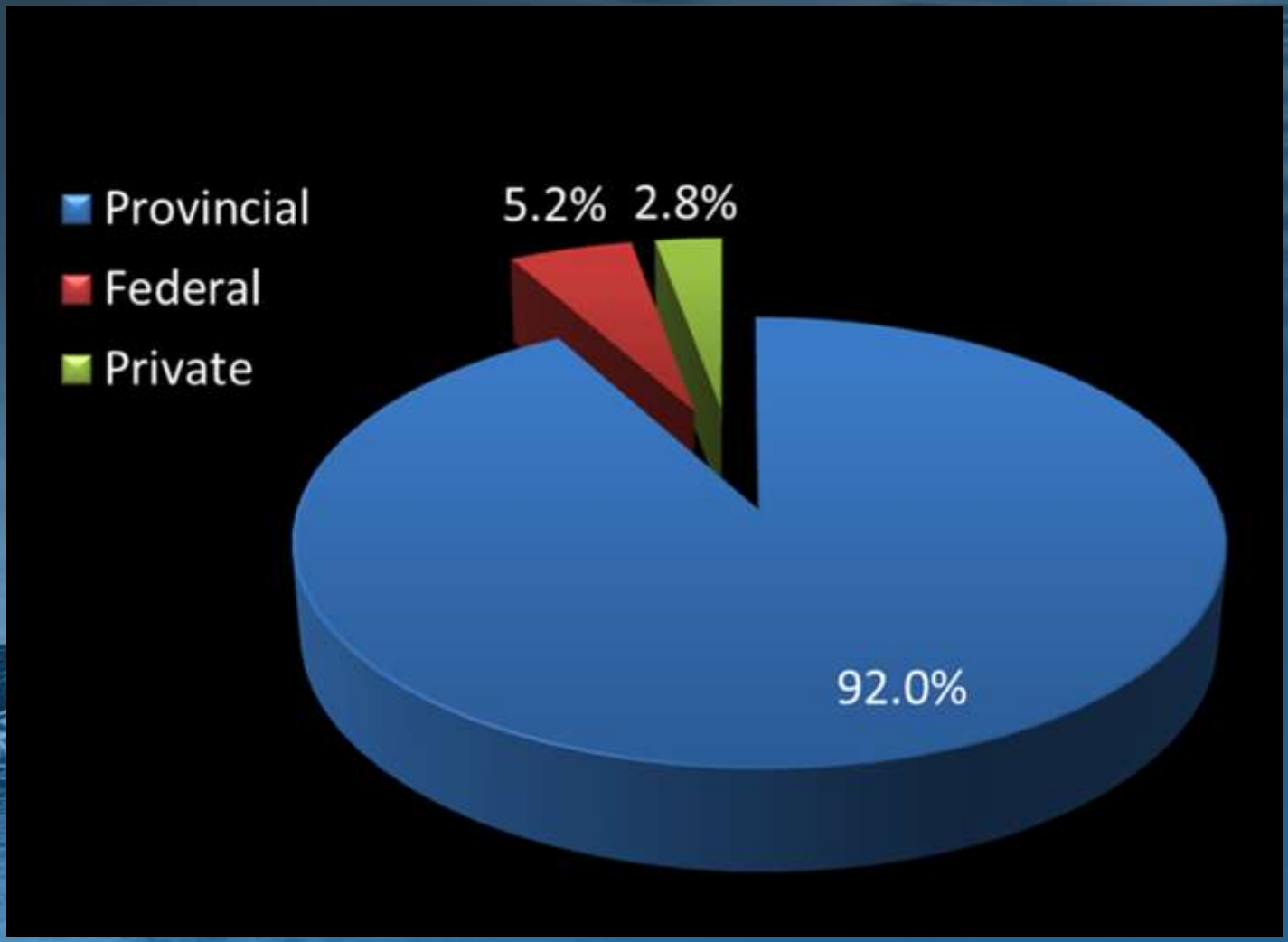
Habitat Goals: Delivery Environment



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Habitat Goals: Delivery

Two primary themes of habitat delivery:

Protected Lands:

Places where development is generally not allowed

Sustainable Land Use Areas:

Development does not impact the habitat's ability to support ducks

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How are these created?

- *Protected Lands*
  - Long-Term:
    - Government-led protected area initiatives (>10 year)
  - Short-Term:
    - Interim withdrawal for government-led protected area initiatives (1-5 years, renewable)
    - Land use planning conservation zones (5 year, renewable)
- *Sustainable Land Use Areas*
  - Private land management
  - Conservation/Cooperative land use agreements
  - Crown agreements
  - Industrial agreements
  - Extension and Policy
  - Integrated land use planning

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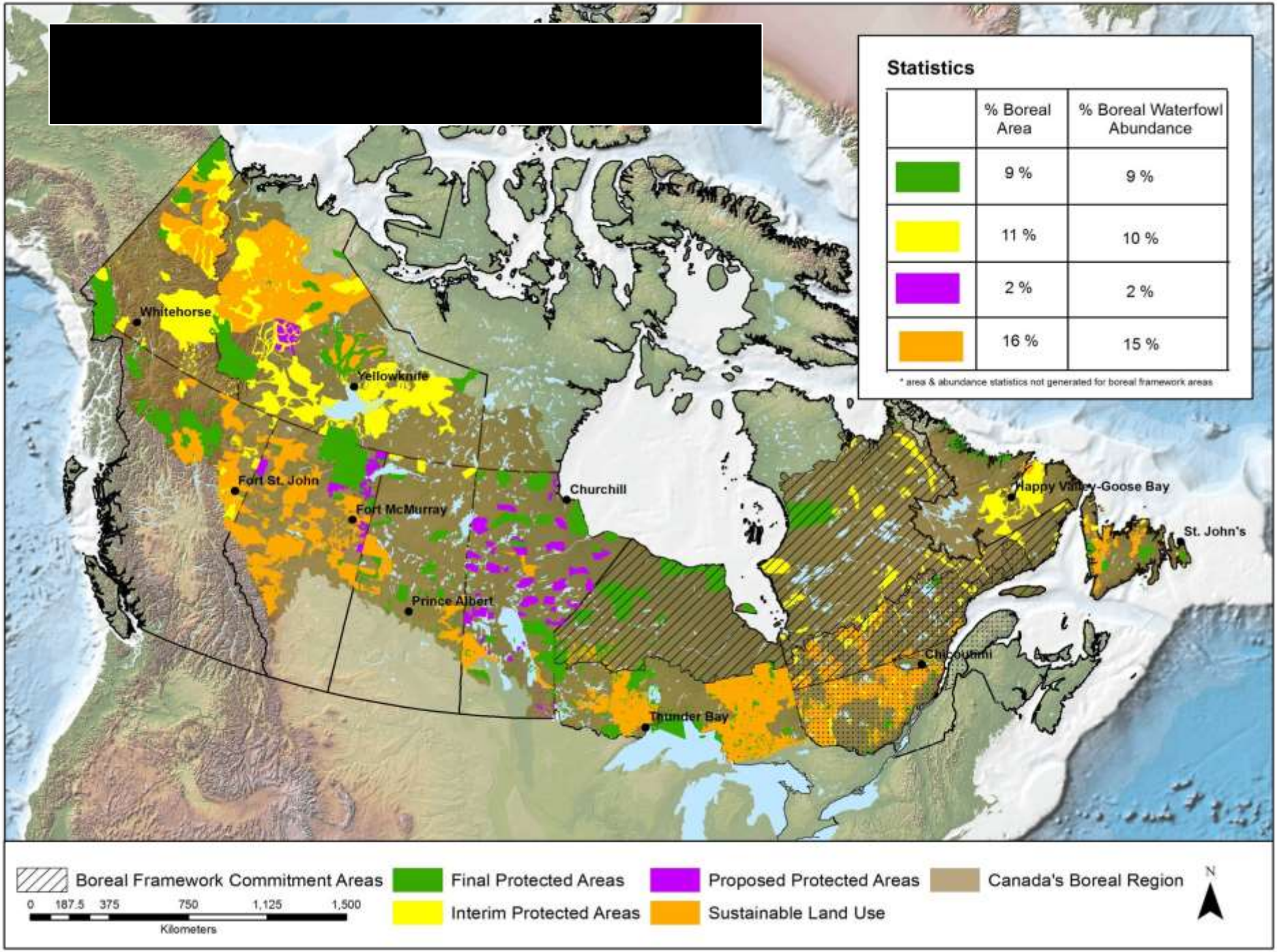
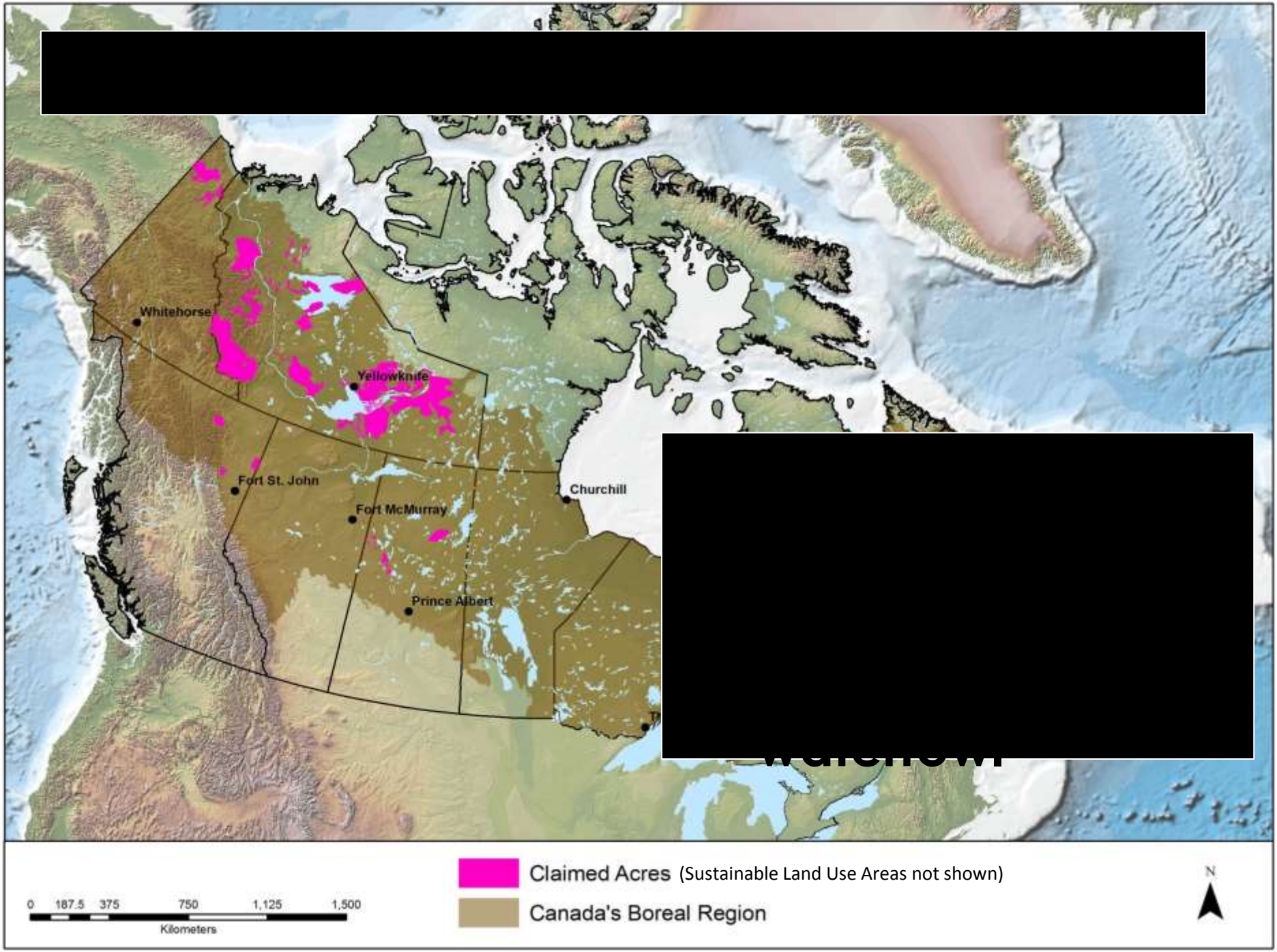
Who is leading this work?

- PHJV Partners, primarily Alberta NAWMP, Ducks Unlimited, and Environment Canada
- NAWCA
- International Boreal Conservation Campaign
- 61 First Nations, Academic, Industrial, Government and Non-Government Partners


Statistics
% Boreal Area
% Boreal Waterfowl Abundance
9 %
9 %
11 %
10 %
2 %
2 %
16 %
15 %
* area & abundance statistics not generated for boreal framework areas
Whitehorse
Yellowknife
Fort St. John
Fort McMurray
Churchill
Prince Albert
Thunder Bay
Happy Valley-Goose Bay
St. John's
Boreal Framework Commitment Areas
Final Protected Areas
Proposed Protected Areas
Canada's Boreal Region
Interim Protected Areas
Sustainable Land Use
0 187.5 375 750 1,125 1,500
Kilometers
N

Delivery Tool	Total Acres (millions)	Waterfowl Acres (millions)
Protected- Long	11.6	3.6
Protected- Short	40.1	27.8
Sustainable Lands	0.7	0.3


Whitehorse
Yellowknife
Fort St. John
Fort McMurray
Churchill
Prince Albert
Claimed Acres (Sustainable Land Use Areas not shown)
Canada's Boreal Region
0 187.5 375 750 1,125 1,500
Kilometers
N

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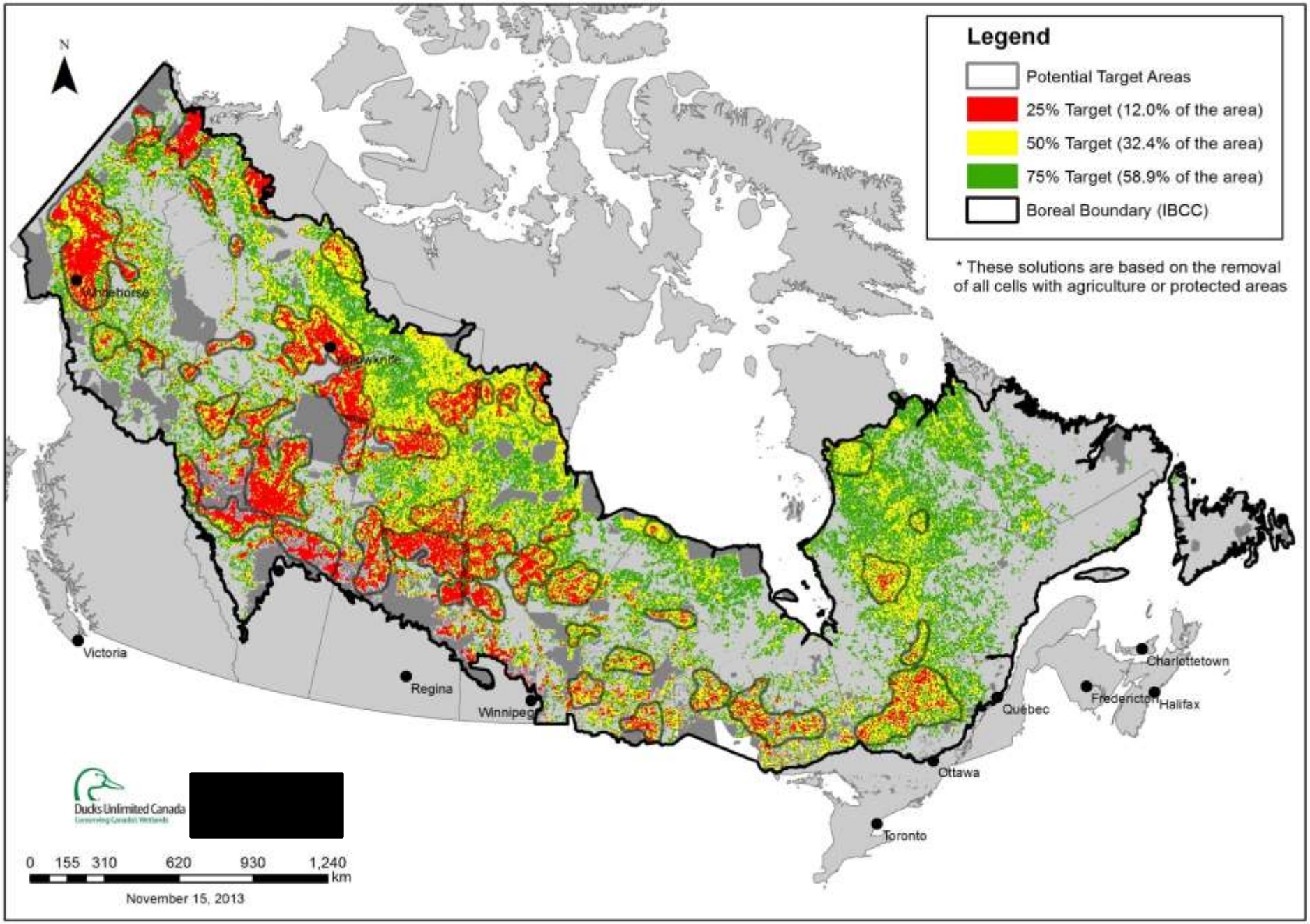
Habitat Goals: Objectives, 2013 – 2020

- **25 year goal- 286 million waterfowl acres**
- **8 year goal – 30.7 million waterfowl acres**

	Protected Lands		Sustainable Land Use Areas	
Jurisdiction	Total	Waterfowl	Total	Waterfowl
Yukon	3.8	1.0	4.1	0.8
NWT	15.6	9.5	16.8	4.9
British Columbia	0.4	0.2	0.8	0.2
Alberta	7.5[1]	3.1	26.1	6.6
Saskatchewan	0.3	0.1	5.4	1.7
Manitoba	3.3[1]	2.4	0.7	0.5
Total	30.8	16.1	53.7	14.6

[1]AB and MB are 92% and 29% accomplished as of 2013

Potential Target Areas: Based on Preliminary Areas of High Waterfowl Abundance



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Habitat Goals: Delivery Approach.

Upland and Wetland Retention is the primary focus

Tactic 1: Develop effective policies to conserve all wetlands, not just in agricultural/settled area wetlands.

Tactic 2: Maintain existing protected land objectives and expand protected land objectives in key waterfowl habitat areas.

Tactic 3: Develop an effective sustainable land use program that promotes PHJV conservation in non-protected areas of the boreal.

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Human Dimension Goals

Main Points

- Aboriginal people, governments, and industries play key roles in land use decisions
- Continentally and globally significant EGS values = many beneficiaries
- Iconic landscape - culturally significant

Objective:

- *Work with northern communities, provincial and federal agencies, industry and other habitat beneficiaries to set and achieve shared conservation goals*

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Science Priorities

Evaluation Objectives	Waterfowl	Non-Game Birds
Set Population Objectives	.	Long
Population Inventories	.	Short
Identify Limiting Factors/Mechanisms	Short	Short
Identify Habitat Associations	Short	Short
Distribution Maps	Long	Long
Habitat Trends and Risk Assessment	Short	Short
Develop Planning Models	Long	Long
Develop SLU Practices	Short	.
Link to EGS	Short	Short
Climate Change vs. PHJV Investment	Long	Long
Evaluate PHJV Programs	Long	Long

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Costs of Conservation (millions)

	2001 – 2012	2013 – 2020
Communication and Education	$12.0	$3.0
Coordination	$6.3	$2.9
Enhancement	$0.1	$0
Evaluation	$12.9	$7.0
Management	$0.1	$5.5
Policy Support	$9.9	$4.3
Reconnaissance/Design	$2.5	$0.6
Securement	$47.6	$12.0
Stewardship	$21.5	$12.0
Total	$113.2	$47.4

Expect to leverage an additional $52.8 million for minimum total of $100.2 million from 2013-2020

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Challenges and Opportunities

- 10 - 15 million breeding season ducks annually
- Key WBF duck species are 20 – 30% below goal
- 40% of wetland-associated non-game bird species may be declining
- No longer pristine- rapid industrial change…BUT much great habitat remains
- Identifying limiting factors is a major information need

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Challenges and Opportunities

- **Moving towards more model-based conservation planning**
- **Timing is right to:**
  - Leverage EGS values for PHJV conservation goals
  - Identify and mobilize key stakeholders
  - Work within existing frameworks and use novel approaches
- **25-year habitat objective: conserve 286 million acres for 7.5 million waterfowl (8-year = 30.7M)**

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Questions about the Western Boreal Forest?

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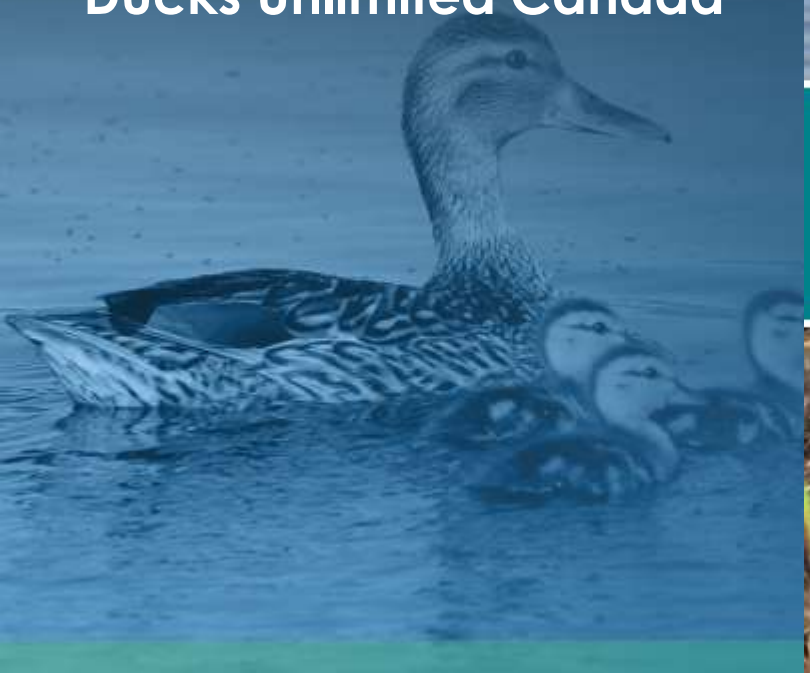
Dr. Jim Devries

PHJV Science Committee

Ducks Unlimited Canada



PRAIRIE HABITAT JOINT VENTURE: THE PRAIRIE PARKLANDS

IMPLEMENTATION PLAN 2013-2020

Status of PHJV Duck Populations

In general, ducks have been doing pretty well,

(given exceptional pond conditions in the past ~5 years)

	Prairie Parklands		NAWMP Revision Goals - PHJV			
Species	2014 estimate	2014 ten-year average	Long-term average (1955-2014)	Long-term 80th percentile	% difference from LTA	% difference from 80th percentile
Dabbling ducks	14,709,000	10,923,000	9,483,000	12,584,000	15	-13
Diving ducks	2,132,000	1,356,000	1,233,000	1,543,000	10	-12
All ducks	16,841,000	12,279,000	10,717,000	13,747,000	15	-11
Ponds	3,809,000	3,292,000	2,762,000	3,643,000	19	-10

… but the “devil” is in the details…

Canadian PRAIRIES - dabbling ducks and ponds

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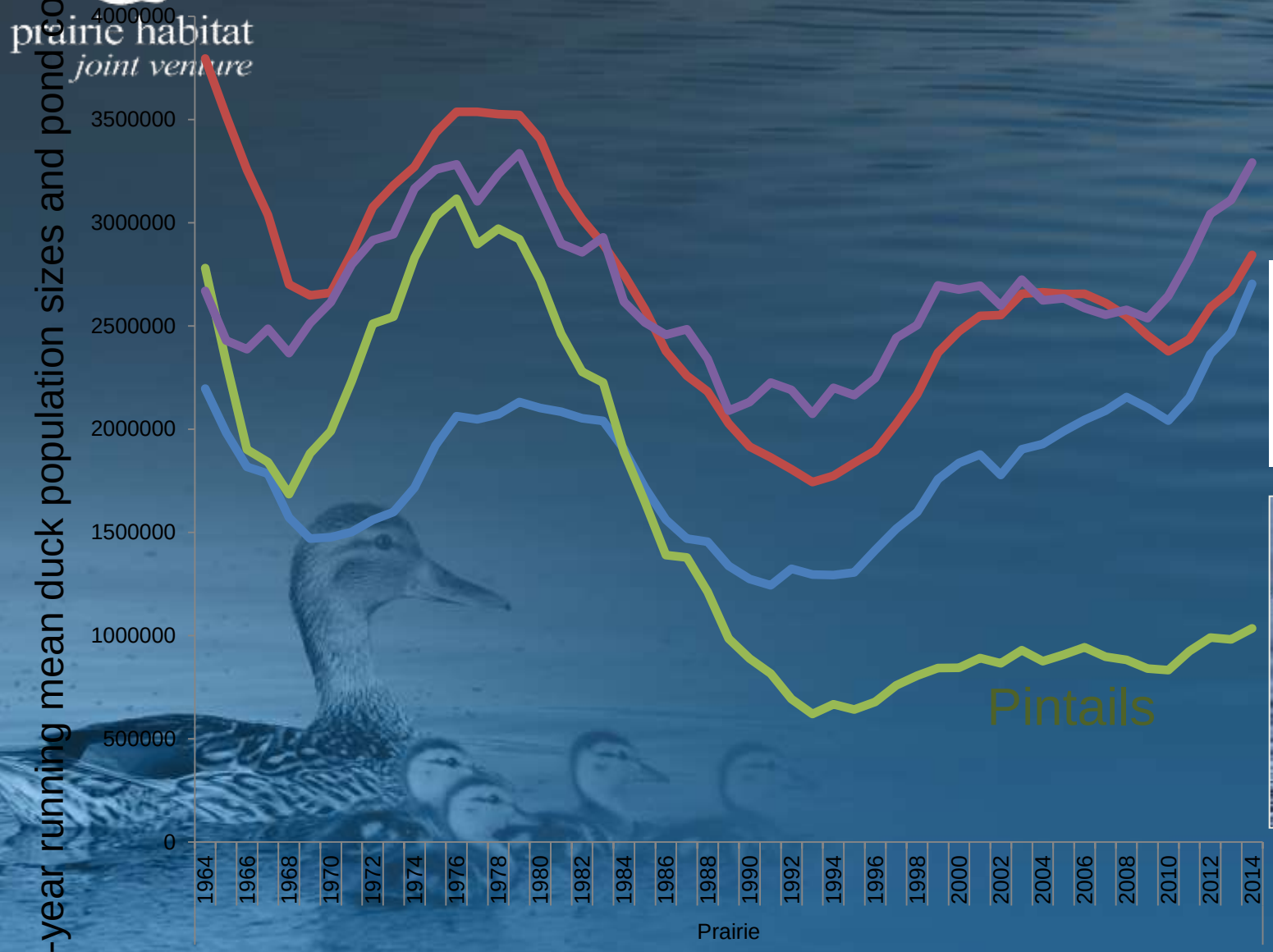


Thanks to Blake Bartzen

Habitat accomplishments (2007-2012)

	5-Year Accomplishments (Acres)				% 5-year	25-Year
	Direct	Stewardship	Policy	Total	Habitat	Habitat Objective
Habitat Restoration					**Objective**	**Acres**
Winter Wheat	11,857	539,603	-	551,460	92%	2,759,300
Tame Pasture	121,487	169,631	-	291,118	35%	4,235,800
Tame Hay	55,412	39,106	-	94,518	16%	2,824,400
Planted Cover	16,310	-	-	16,310	185%	79,200
Wetlands *	5,312	22	-	5,334	49%	278,200
Nesting tunnels (structures)	825	-	-	825	103%	2,200
Restoration Sub-total	211,203	748,362	-	959,565	-	10,179,100
Habitat Retention						
Wetland	113,555	28,183	-	141,738	10%	2,867,600
Upland **	316,573	152,677	13,860	483,110	114%	2,847,200
Retention Sub-total	430,128	180,860	13,860	624,848	34%	5,714,800
Grand Total	641,331	929,222	13,860	1,584,413	41%	15,893,900

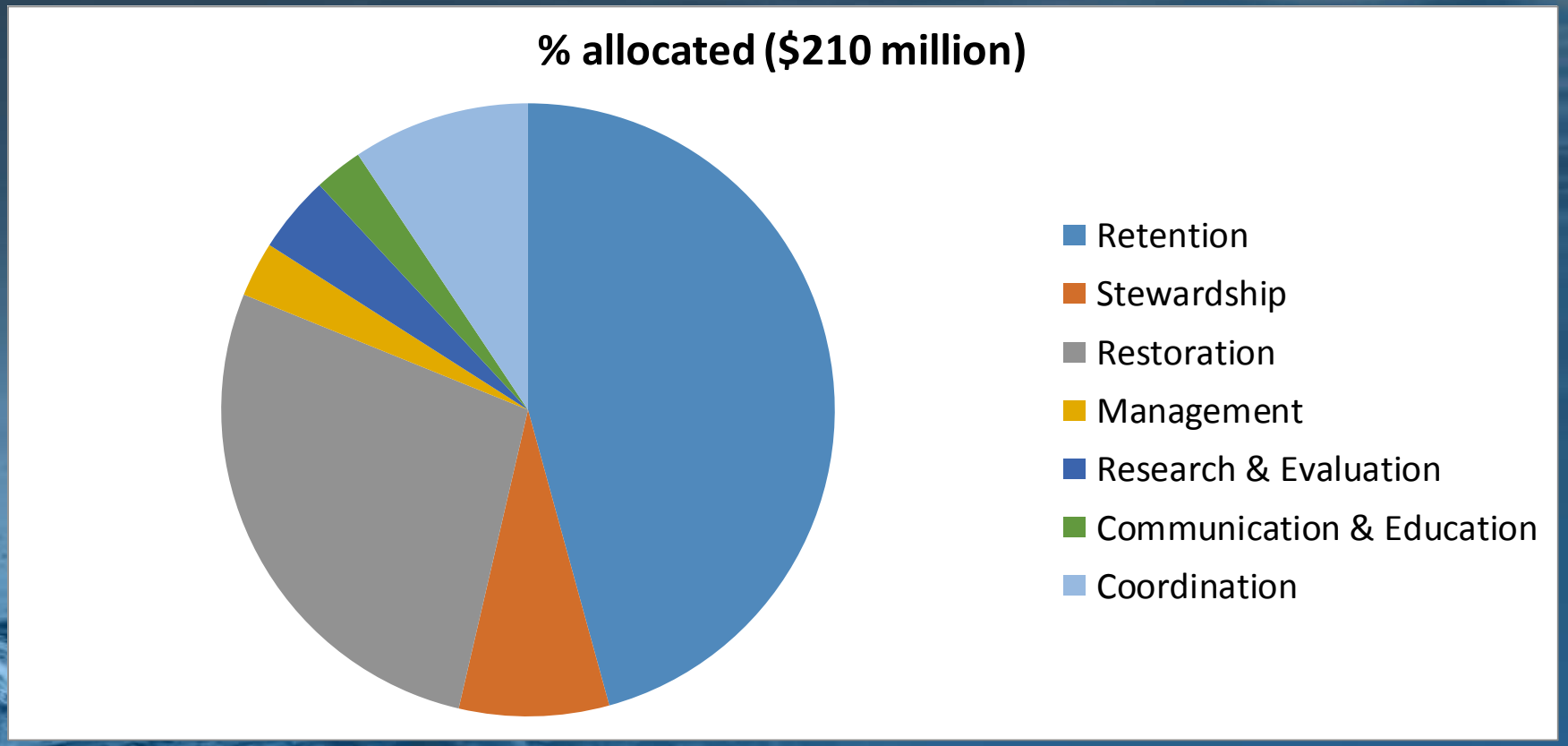
Over 1.5 million of acres conserved, 2007-2012.

	Restoration	Retention
Wetlands - Direct	5,300	113,600
Uplands - Direct	205,900	316,600
Wetlands - Stewardship	-	28,200
Uplands - Stewardship	748,300	152,700
Totals	959,500	621,100*

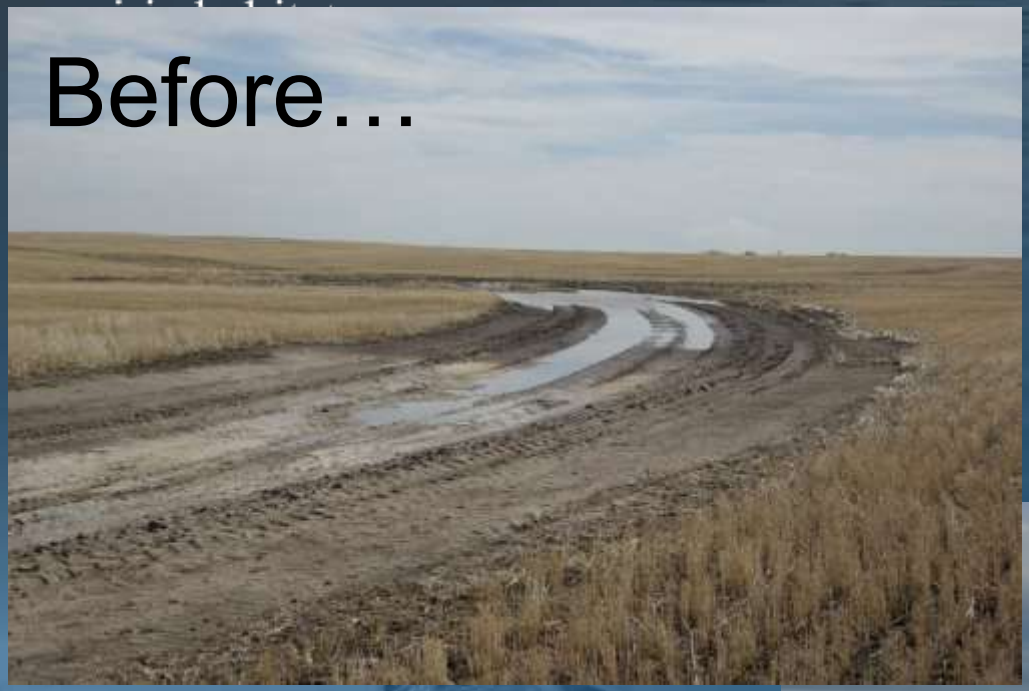
* Includes an addition13,860 upland acres (policy-related program).

Costs of PHJV Programs and Operations, 2007-2012

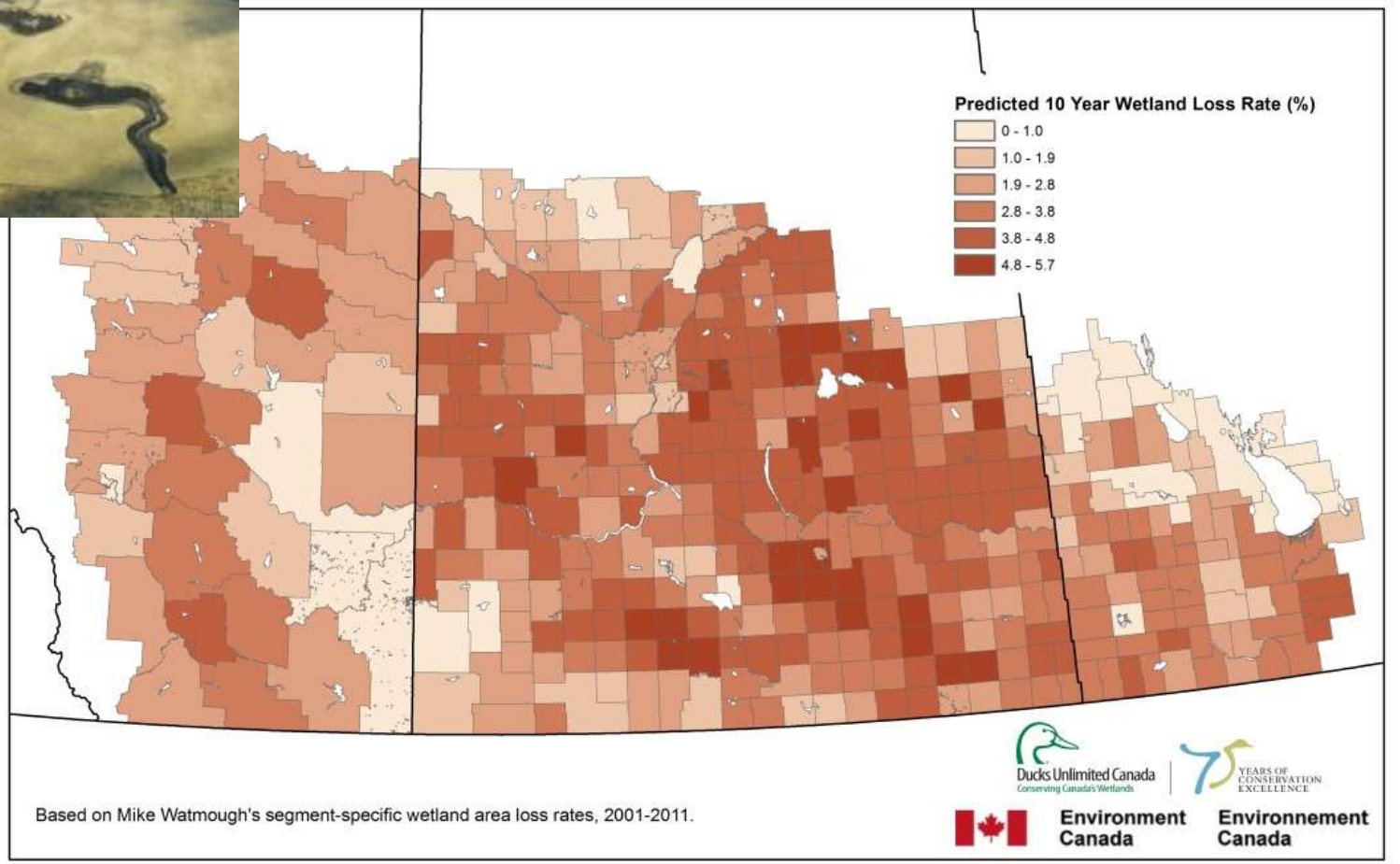
(source: NAWMP National Tracking System).



Only 49% of the 5-yr wetland restoration target was achieved.



“While highly variable across the PHJV area, overall wetland loss rates have shown no sign of abating over the last several decades, representing a significant challenge to the PHJV.”



Model-based estimates of wetland loss rates by municipality, 2001-2011, in the PHJV area.

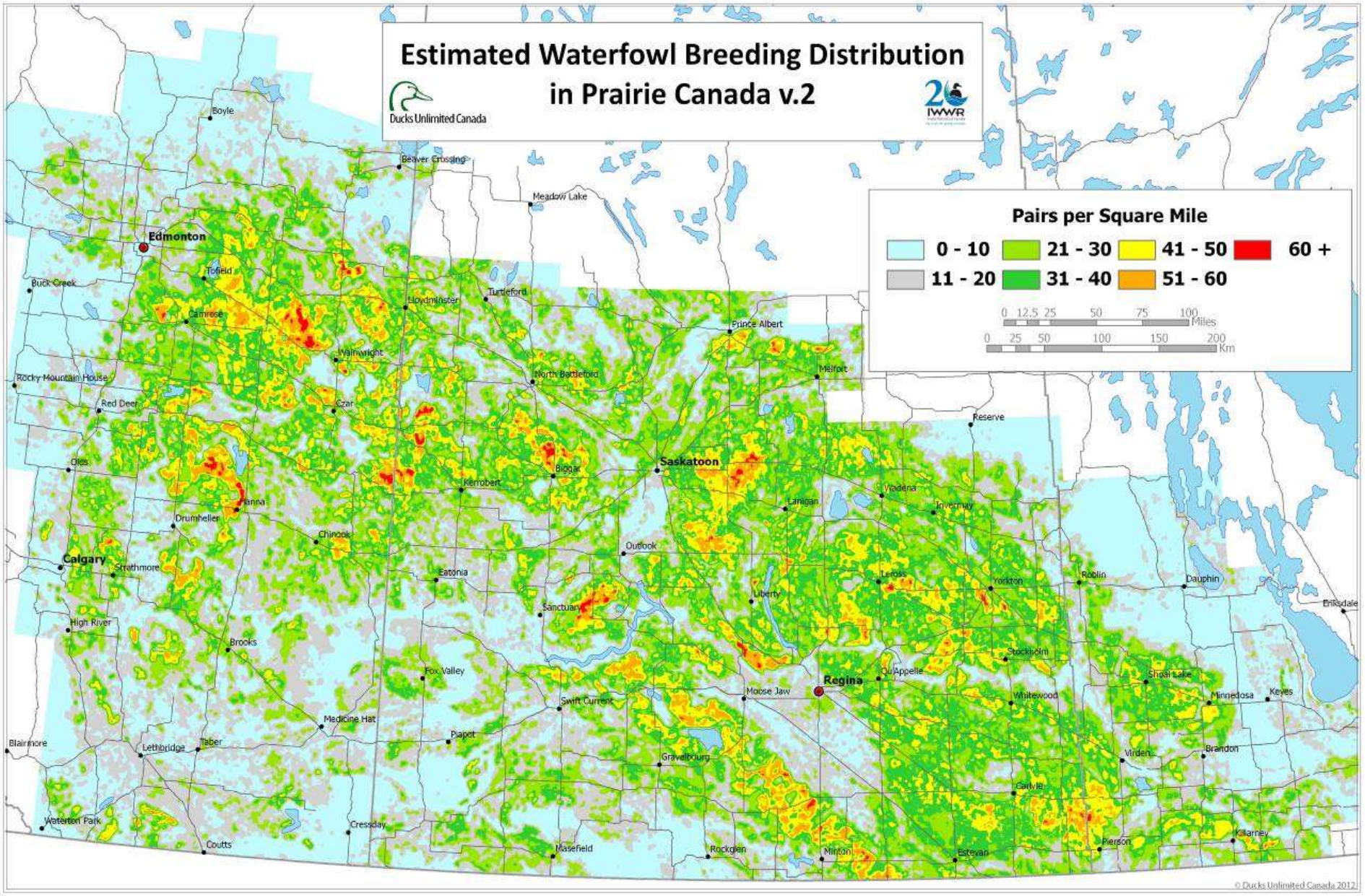


Figure A5-2. Estimated long-term average distribution of the seven most common dabbling and diving duck species breeding in prairie Canada.

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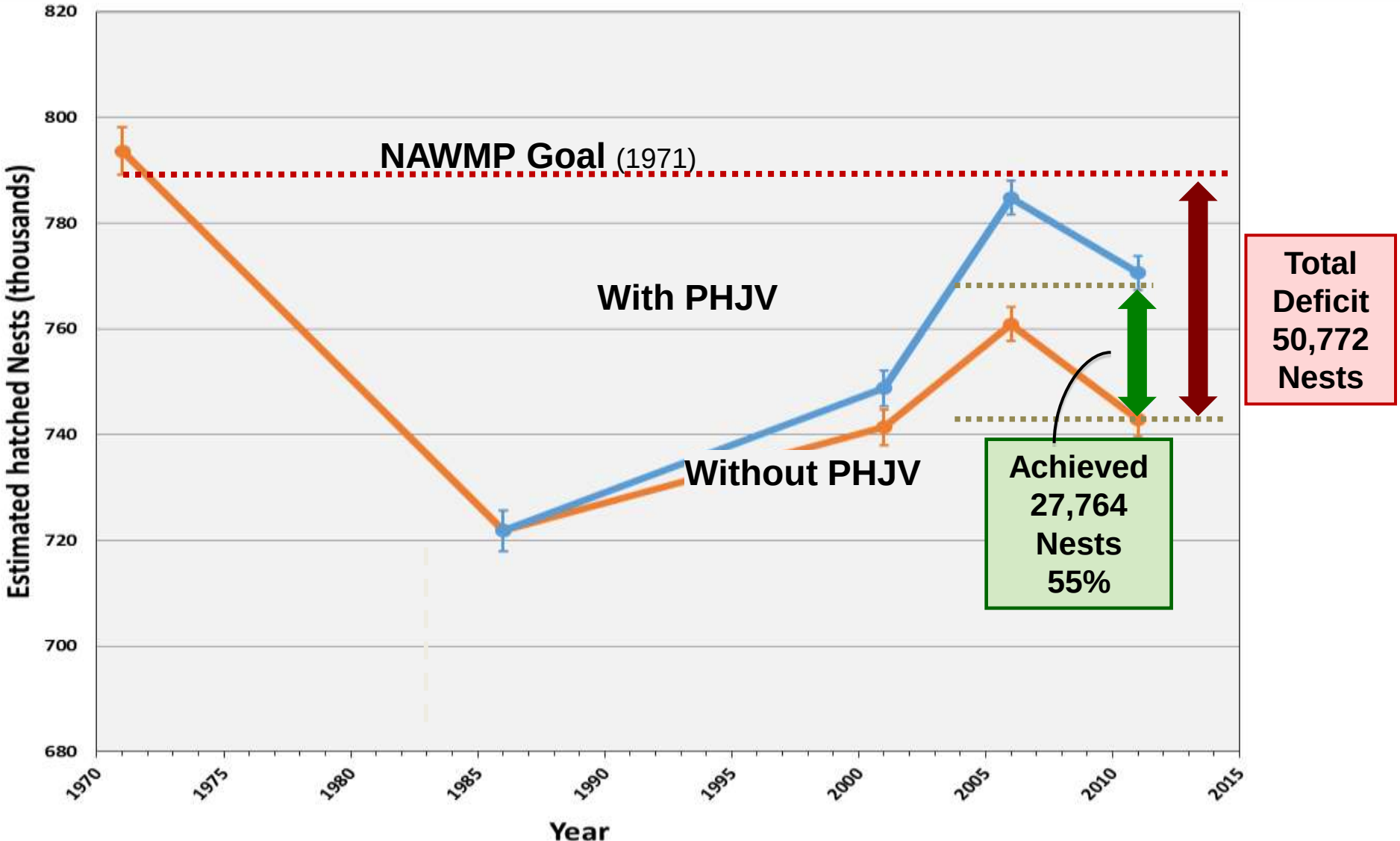
Impacts of PHJV on (annual) estimates of duck productivity



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Planning for the future

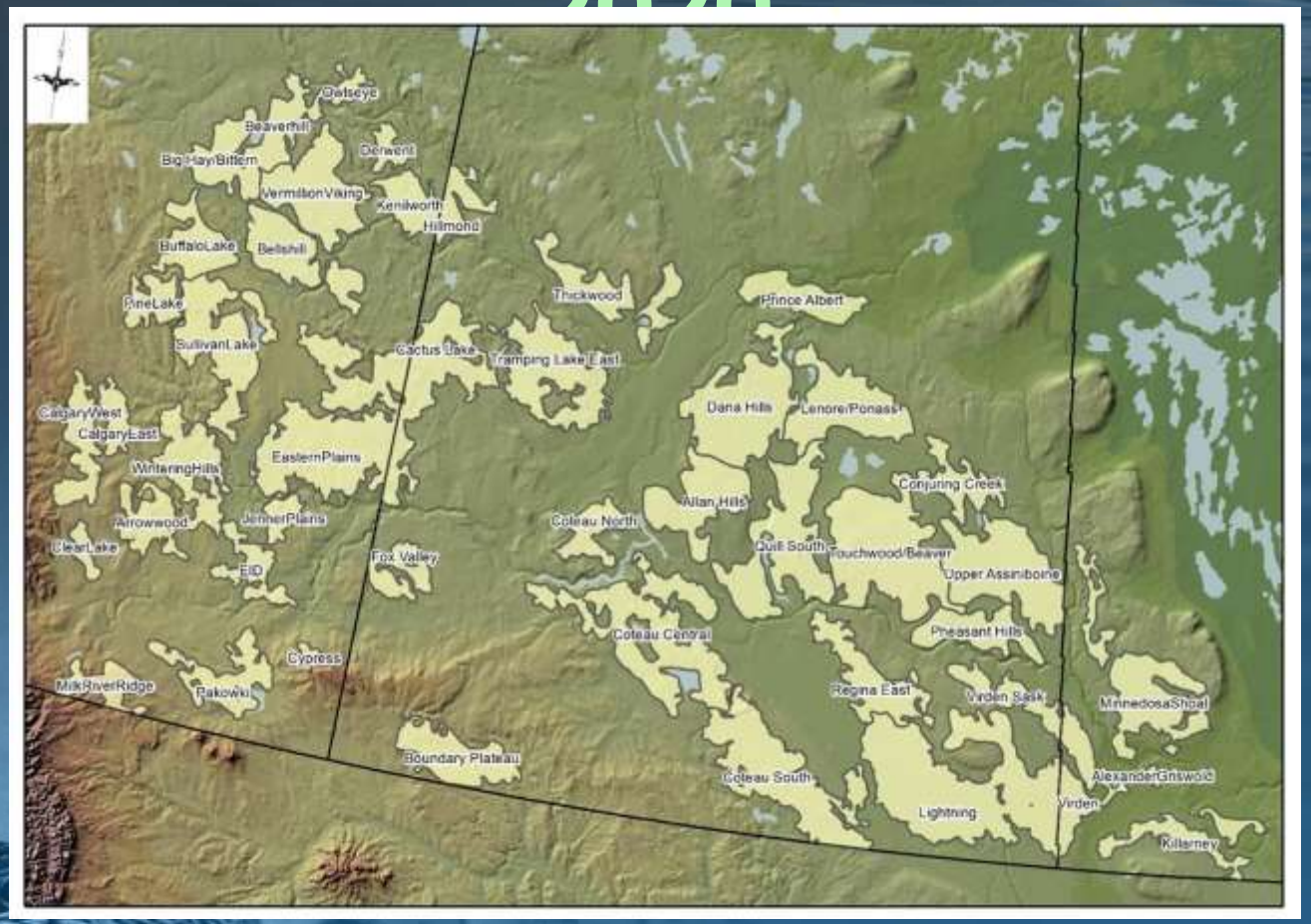
Adaptation - what's new and what will it mean?

When the revised NAWMP Goals were released in October 2014, the PHJV 's planning process was nearing completion.

PHJV's new habitat objectives are expected to support periodic "booms" in duck population sizes (80th percentile values).

PHJV's objectives for people will be developed over the next 2-3 years.

Setting new habitat objectives to 2020



Targeting efforts in these landscapes directs conservation resources to areas of highest average duck density, with special consideration for pintails and special areas of high wetland value:
21 Target Landscapes in AB, 21 in SK, and 4 in MB.

Revised

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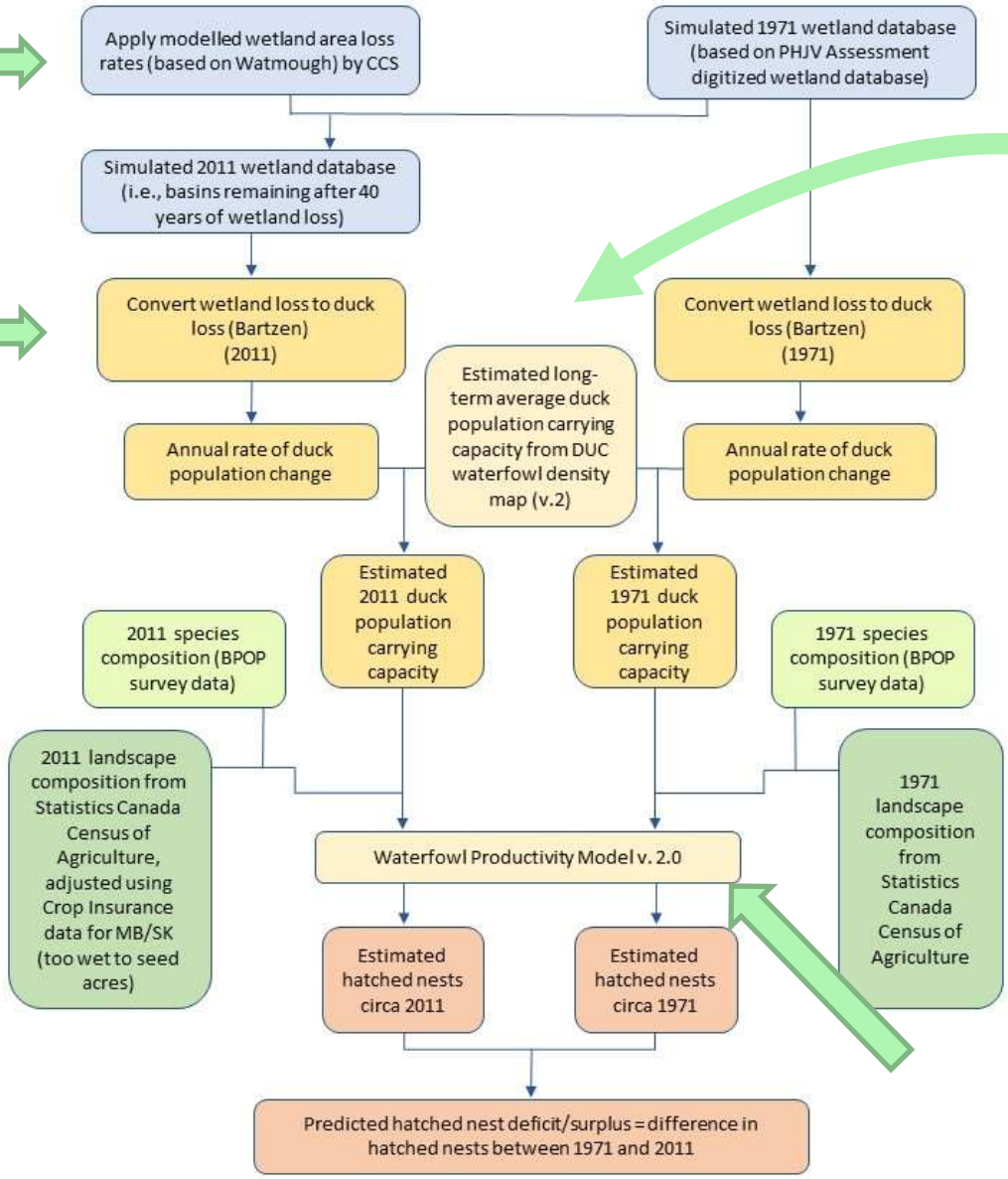
Flow chart of steps taken to calculate current (2011) deficit



$P_h = f(\text{IDATE, PINDEN, \%GRASS})$

Potential Nests Initiated

P_h = *preference for habitat h*
A_h = *availability of habitat h*

$$Nests_h = \left(\frac{P_h * A_h}{\sum_h^k (P_h * A_h)}\right) * Total\ Nests$$

Pintail Pairs

Distribution of nests among habitats

Habitat A | Habitat B | Habitat C | Habitat D | Habitat F | Habitat E

NS | NS | NS | NS | NS | NS

Estimated Hatched Nests

Application of nest survival rates by habitat

$NS_h = f(\text{IDATE, PINDEN, \%CROP})$

Habitat Restoration Objectives, 2020 & 2030

Habitat Restoration	Year 2030 Habitat Objective Acres	By 2020, 8-Year Objectives (Acres) Direct NAWMP	Stewardship NAWMP	Total	% of 2030 Habitat Objective
Winter Wheat	15-20% of all wheat acres	-	-	15-20% of all wheat acres	
Tame Pasture	1,476,738	274,165	316,530	590,695	40%
Tame Hay	996,461	73,828	324,758	398,586	40%
Planted Cover	66,096	26,439	-	26,439	40%
Wetlands	77,864	7,900	-	7,900	10%
Nesting tunnels	3,400	1,360	-	1,360	40%
Sub-total	2,620,559	383,692	641,288	1,024,980	39%

Habitat Retention Objectives (acres), 2020 & 2030

Habitat Retention	Year 2030 Habitat Objective (acres)	By 2020, 8-Year Objectives (Acres) Direct	Stewardship	Total	% of 2030 Habitat
Wetland	847,630	343,402	-	343,402	41%
Upland	829,684	340,724	-	340,724	41%
Sub-total	1,677,314	684,126	-	684,126	41%

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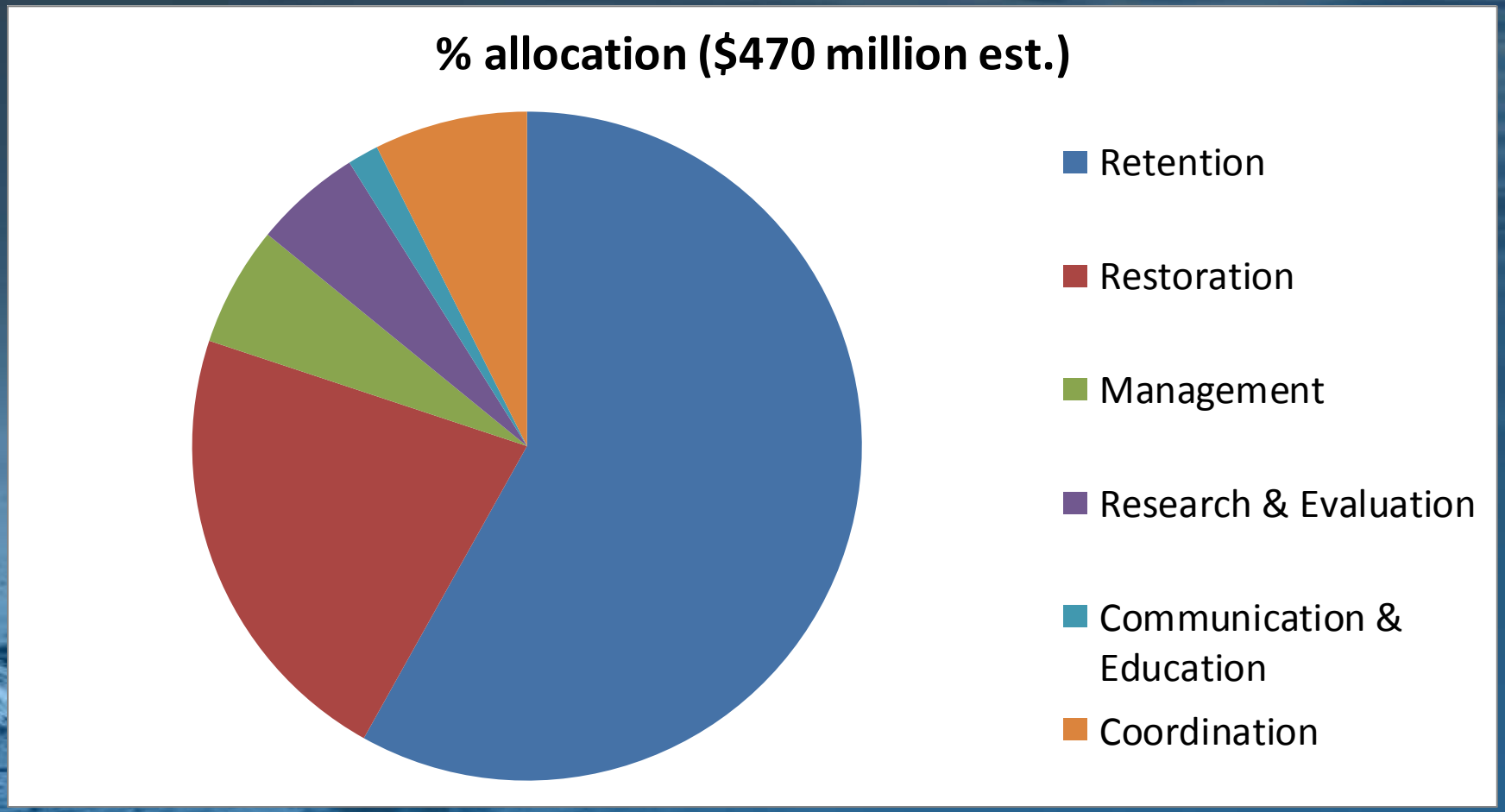
Projected costs of PHJV Programs and Operations, 2013-2020.



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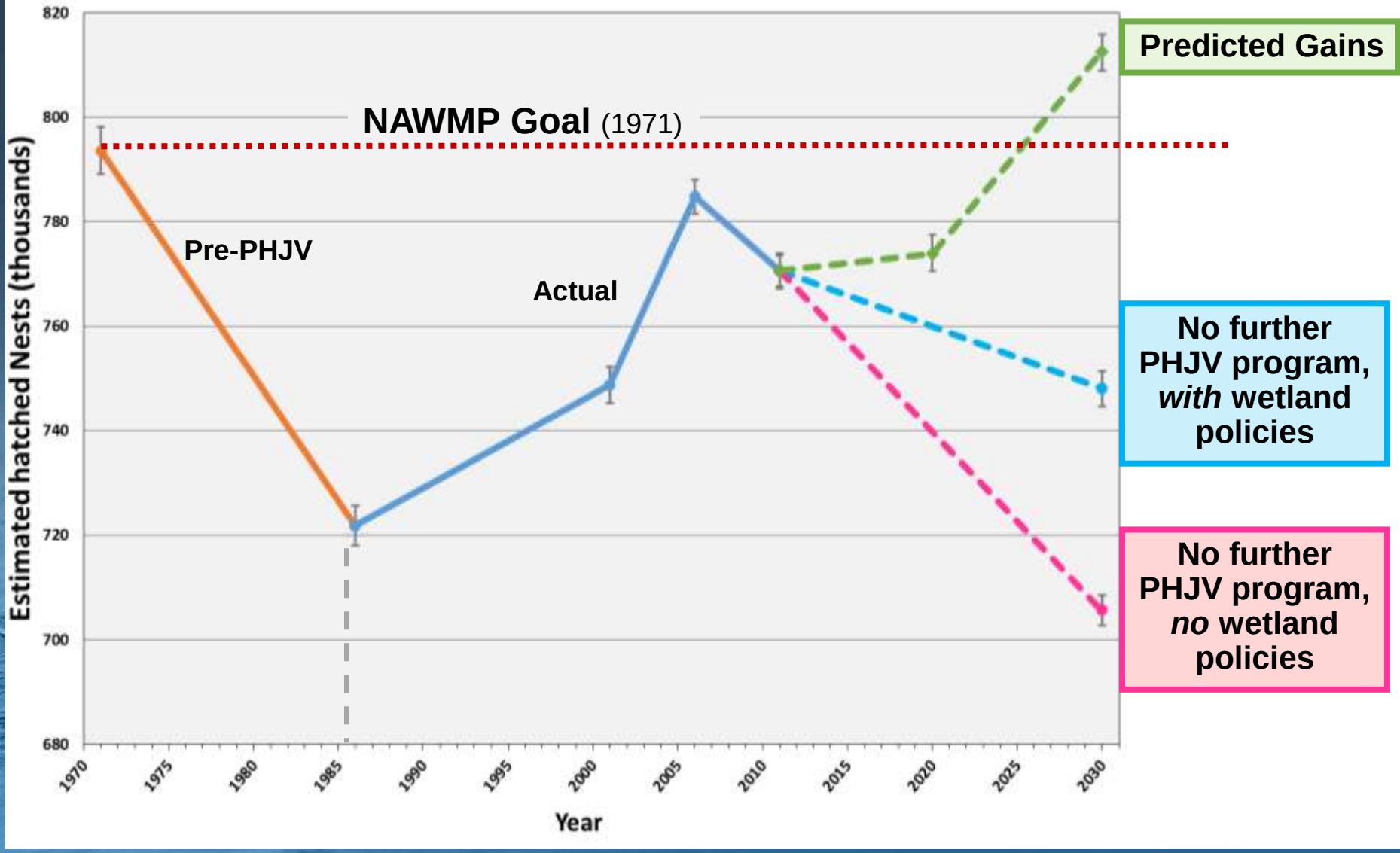
Projected impacts on (annual) duck productivity



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Challenges

- **Ongoing loss of natural habitats.**
- **Wetland restoration is difficult:**
  - Exceptionally wet conditions – many landowners remain interested in drainage.
  - High crop prices and land values.
  - Some reluctance for long-term Conservation Easements.

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Wetland policies –good news!

- **Alberta's Wetland Policy (June 2015)**
- **Manitoba's pending drainage regulations.**
- **Saskatchewan, in development.**

The policy landscape is shifting toward conservation policies to *manage flooding, conserve water quality and protect habitat*.

These are the explicit cornerstones of emerging policies in all three PHJV jurisdictions.

Innovation in program delivery

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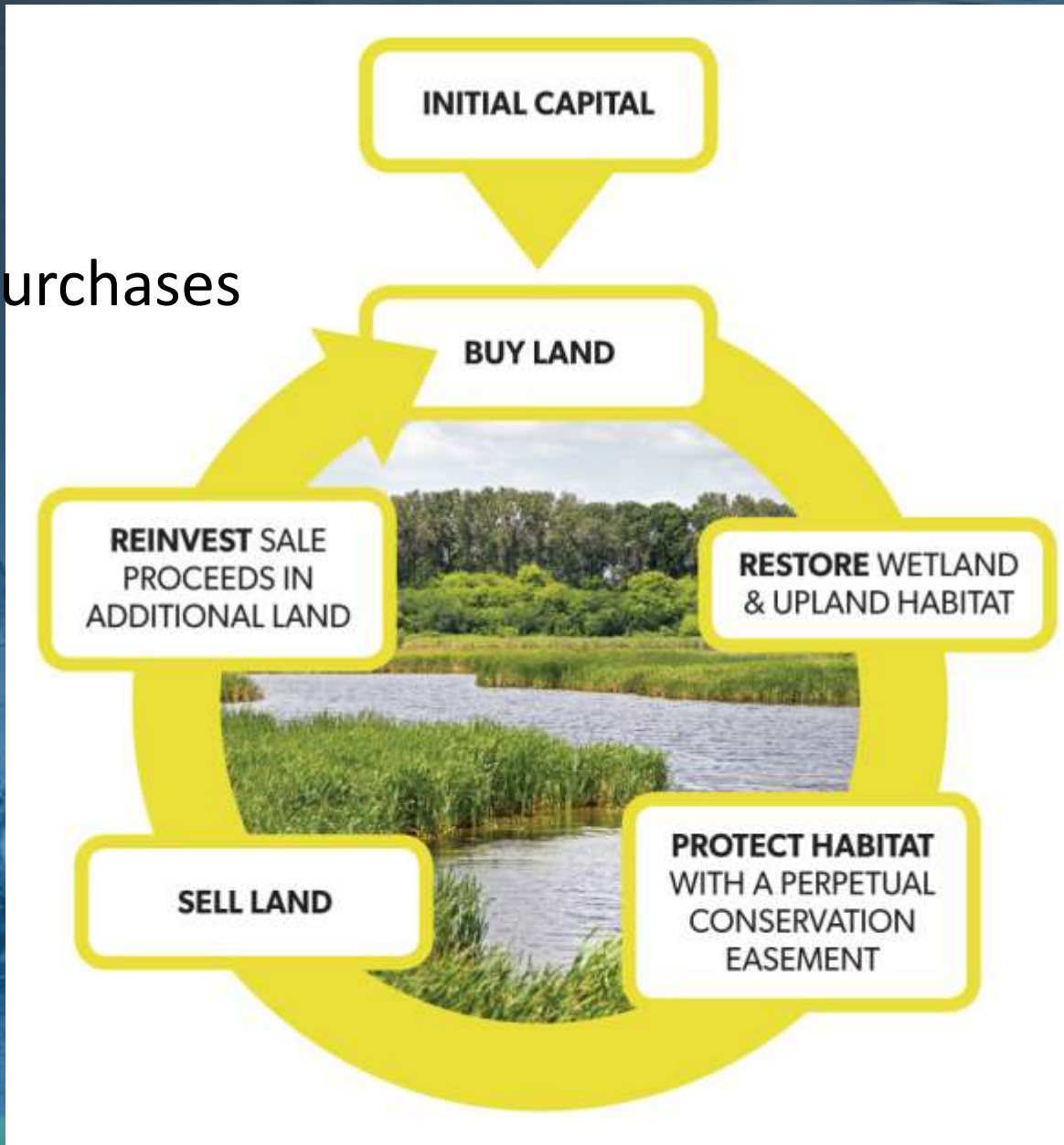
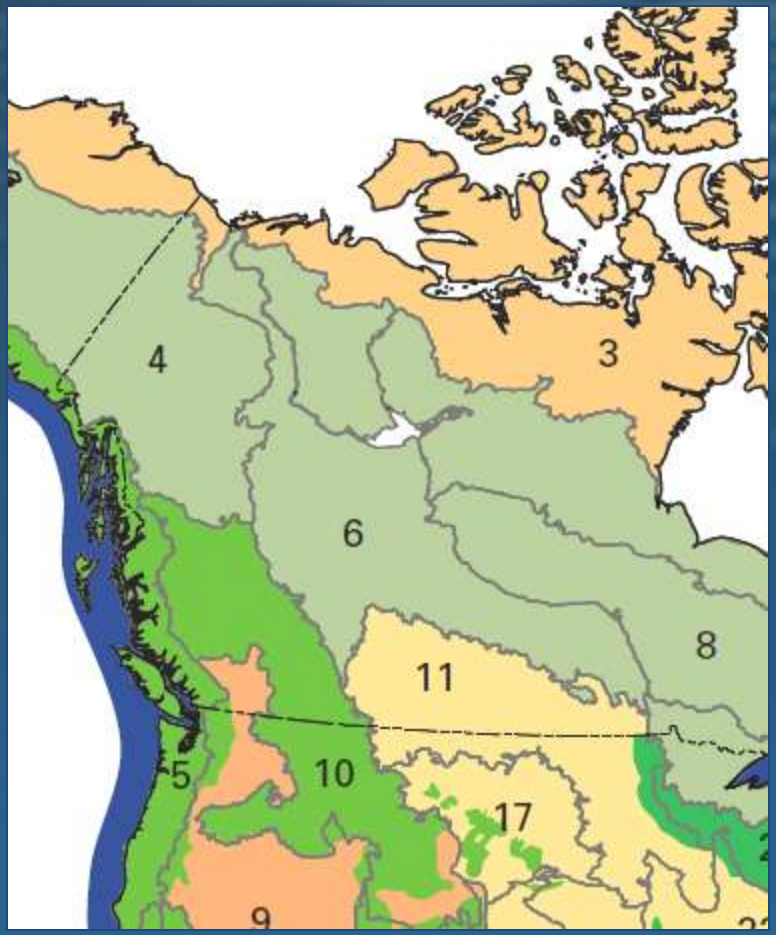
Revolving Land Purchases



Non-game bird component

- Alignment with BCR's "priority" species objectives.
- Consistent with Species at Risk recovery plans.
- New marsh bird products have been developed.



Bird Conservation Regions

Predicted occurrences of 10 species.

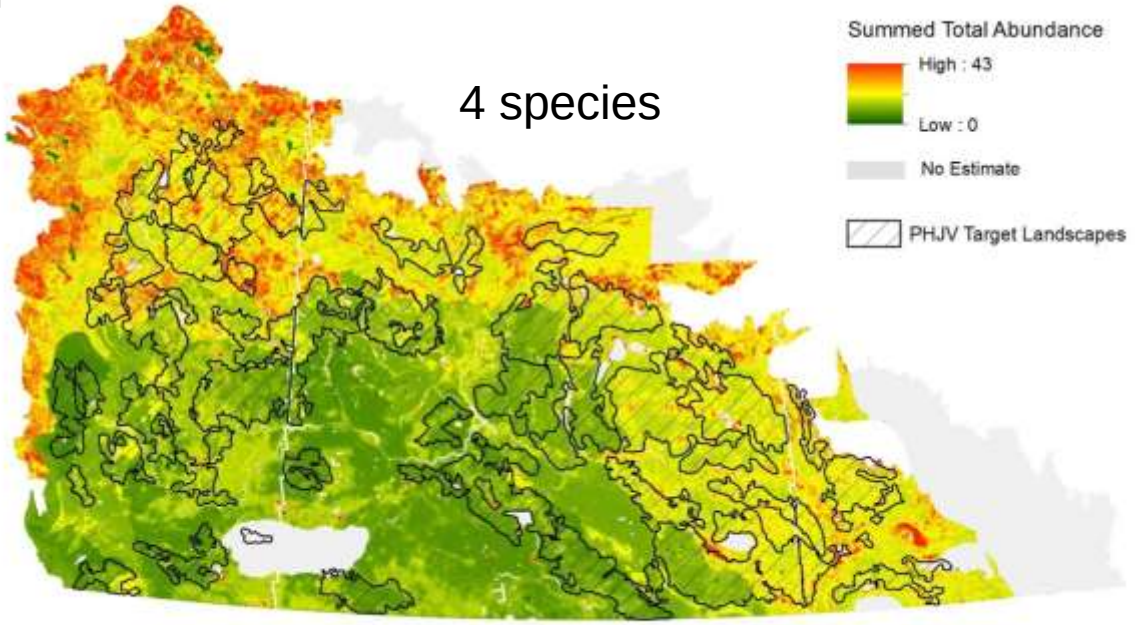
Decision support tool (DST) for marsh bird species

(K. Drake, Bird Studies Canada)

Next steps:

- Model validation and refinements
- Integrate with DSTs for ducks.
- Extend to other non-game guilds.

4 species



Predicted abundances of 4 species.

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Program-Policy Linkages

- We've covered most core and new components of PHJV's implementation plan.
- BUT - what's the PHJV's plan in terms of policy priorities and initiatives?

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PHJV Policy Committee

Peter Joyce

PHJV Policy Committee

Saskatchewan Environment

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PHJV policy priorities

1. Stop wetland loss and restore lost wetlands through :
   - -provincial policies protecting wetlands
   - -consistent mitigation frameworks

2. Stop further loss of native grasslands through:
   - provincial policies protecting grasslands
   - initiatives to increase economic viability of perennial cover and native habitats

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Most valuable PHJV policy roles…

- Standardizing and sharing information between provinces
- Networking between provinces to share experience and information
- Facilitating a consolidated and standardized inventory of wetland and native prairie habitat
- Analyzing new program/policy implications for wetland and permanent cover retention

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Opportunities and challenges…

- Coincidence of strategic interests between PHJV and grazing livestock industry
- Challenges of direct competition for high value land
- Apprehension about conservation interests in rural communities related to Species at Risk
- Limited government officials' awareness of PHJV

5- year work-plan activities & outcomes (Accepted by Board June, 2014)

Activities		Desired Outcomes
Active support from Policy Coordinator tailored to unique needs of each province		Interprovincial awareness, learning, collaboration
Periodic workshops for policy practitioners		Increased interagency policy capacity
Assessments of PHJV alignment with formal plans and priorities of each province		Improved recognition of PHJV alignment with provincial plans and priorities
Relationship development plan for grazing livestock industry		Strategic relationship established between PHJV and grazing livestock industry
PHJV implementation plan narrative broadened to reflect coherence with current policy concerns		Broader scope for the PHJV "story" to support above
Business case for standardized prairie habitat inventory		Business case developed (and marketed) for consolidated, standardized prairie habitat inventory

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Questions for Jim and Peter?

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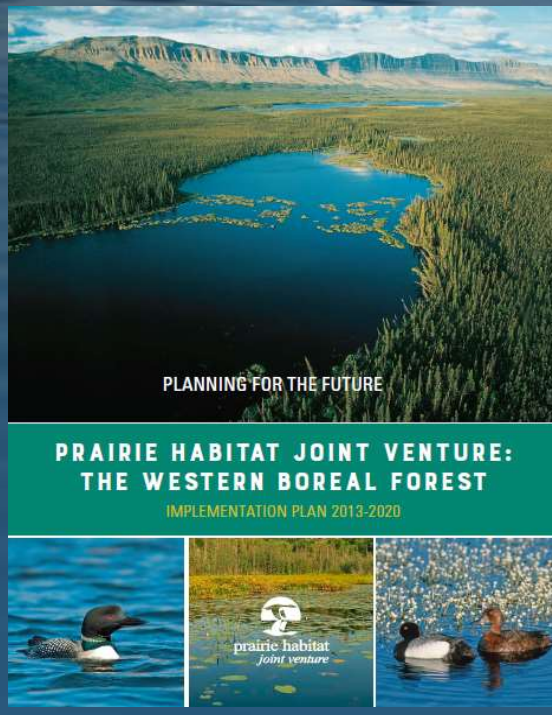
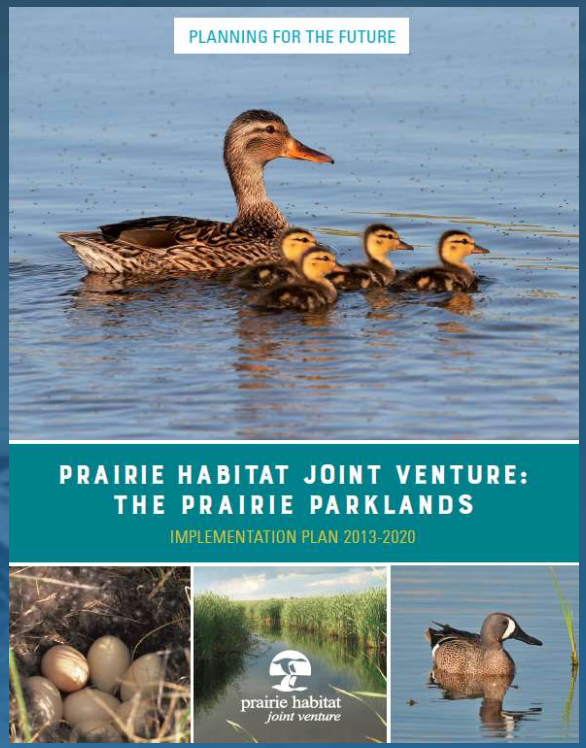
Prairie Habitat Joint Venture

Bob Clark

PHJV Science Committee

Environment Canada





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Wrapping it all up…

- Short summary
- Relevance to the NAWMP Revision 2012
- Address previous Plan Committee (PC) review recommendations.
- Suggestions about how the PC could assist the PHJV in achieving its goals?

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PHJV Region

- **The PHJV area is vast and diverse**
  - Biological, political, land tenure, socioeconomics and culture.
- **PHJV partners must remain alert and flexible, evaluating and adjusting programs and policy efforts in response to new information.**

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Summary – Prairie-Parkland Region

- Over 1.5M acres of habitat retained and restored (~ $210M).
- Duck population trends positive with a few exceptions, most notably pintails.
- Wetland policy environment is positive.
- Looking forward: 1.7M acres (~ $472M)

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Summary – Western Boreal Forest

- Over 30M acres under protection (~ $113M)
- Duck population status trends are generally good, with concerns about wigeon, scaup, scoters.
- Looking forward: 31M acres (~ $100M)

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Relevance to the NAWMP 2012 Revision…

- Maintain long-term average duck populations in the Traditional Survey Area, along with periodic "booms".
- Conserve a habitat system with the capacity to maintain long-term average waterfowl population levels, to periodically support abundant populations, and to consistently support resource users at objective levels.

NAWMP Goal for Waterfowl Supporters: Growing numbers of waterfowl hunters, other conservationists and citizens who enjoy and actively support waterfowl and wetlands conservation.

(Increase waterfowl conservation support among various constituencies to at least the levels experienced during the last two decades)

The PHJV Advisory Board and partner organization staff have already begun a transition to incorporating (*integrating*) human dimensions into the PHJV's overall strategic planning and program delivery.

The current challenge for the PHJV is to identify what role it should play in including diverse groups of stakeholders including landowners in discussions regarding wetland and waterfowl conservation, participation in conservation programs and waterfowl hunting.

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Addressing recommendations from the previous PC review

- **Why is the Western Boreal Forest important?**
  - Duck populations
  - Species of concern
  - Interactions between biomes.
- **Should there be a JV for the WBF?**
  - Cost-effective approach exists
  - Review and revisit periodically.

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Addressing recommendations from the previous PC review

- **How will climate change be factored into planning?**
  - Embedded in the Prairie-Parkland decision support tools (e.g., via anticipated impacts on land use and wetlands).
  - PHJV has a very active role in annual life-cycle models for pintails and scaup; these enable scenario-playing.

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Addressing recommendations from the previous PC review

- **Enhanced communications**
  - Wetland forums
  - Engagement with PPJV technical committee (led to LCC-funded project).
  - Updated communications plan to accompany the new habitat implementation plans – mechanisms under discussion (e.g., media options).

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Addressing recommendations from the previous PC review

- **Expand efforts for wetland inventory and landscape monitoring.**

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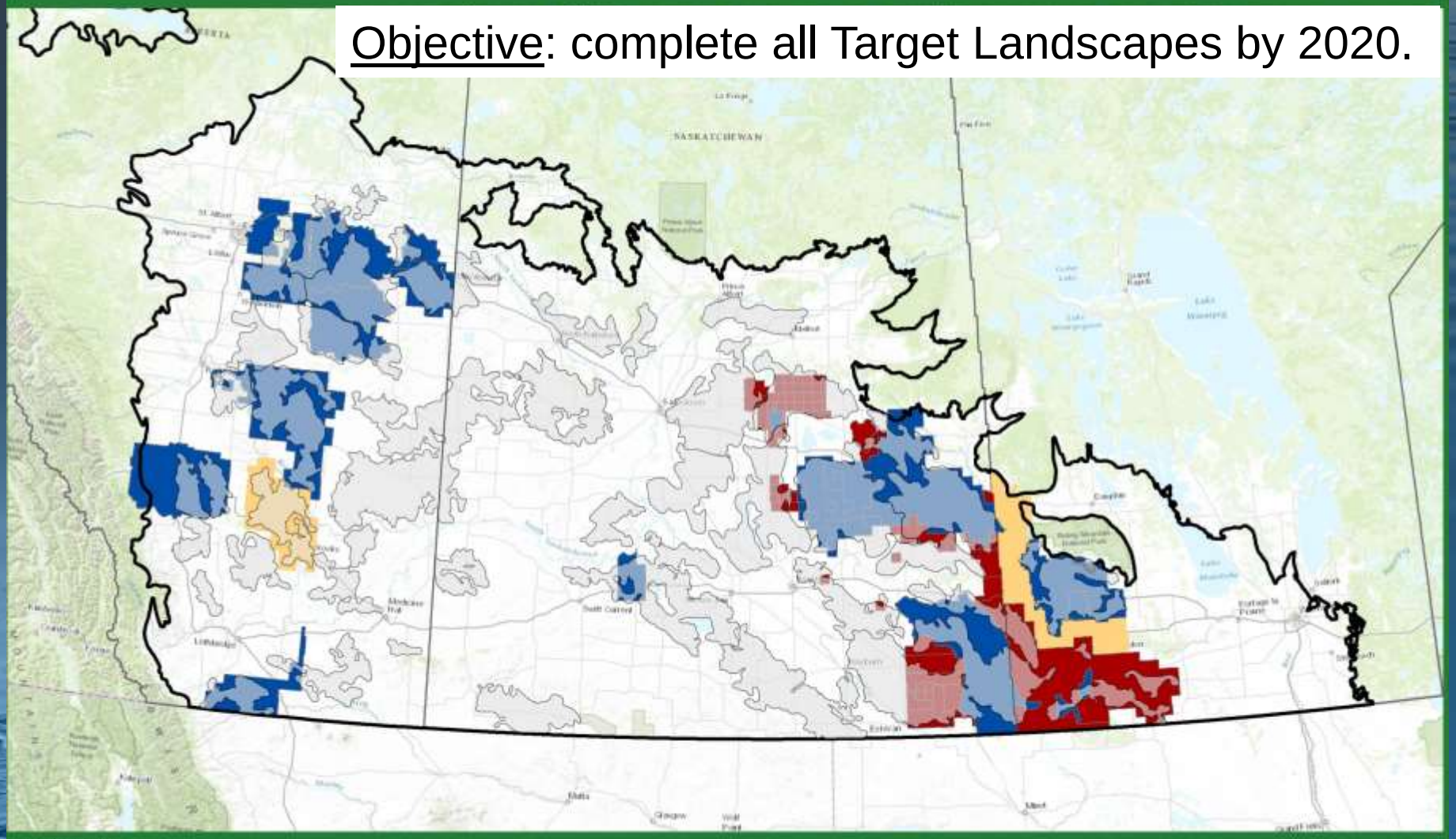
Can the Plan Committee assist the PHJV? How?

Ducks Unlimited Canada
Conserving Canada's Wetlands

High Resolution Canadian Wetland Inventory
Current Status July 2015
Prairie Pothole Region

Objective: complete all Target Landscapes by 2020.



CWI Status
- Complete
- In Progress
- Proposed 2015
- DUC Target Areas

0 65 130 260
Kilometers
NAD 83 UTM Zone 13N

Sources:
CWI Status Version 9, Ducks Unlimited Canada, 2015.
WSA Inventory Status; Water Security Agency, 2015.
MHHC Inventory Status; Manitoba Habitat Heritage Corporation, 2015.

Inventory of (native) grasslands

Source: DU Canada

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Boreal forest – wetland inventory

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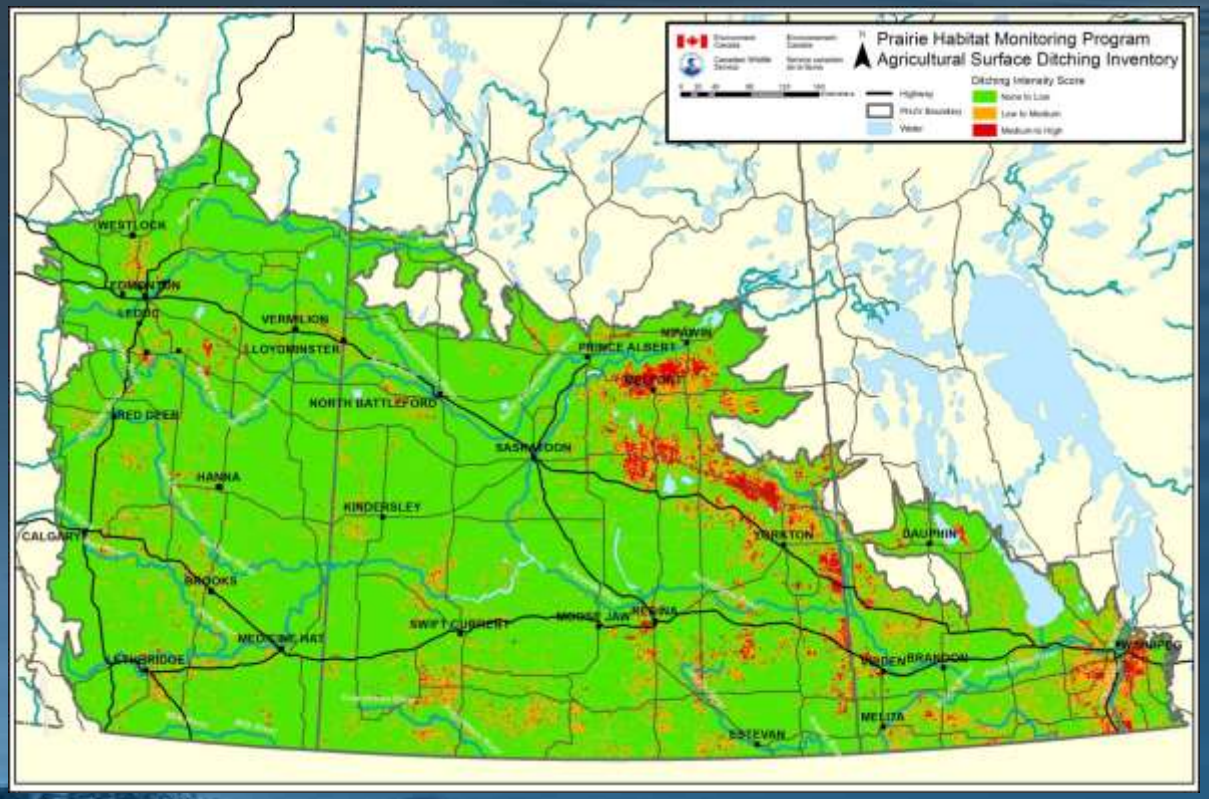
Recommendation 2
Net landscape change monitoring

- Wetland and landscape change inventories and monitoring are essential for both policy and program guidance.

Ditching inventory



The ditching inventory illustrates an enormous conservation challenge for the PHJV and also demonstrates clearly where restoration efforts could be directed to restore watershed function and potentially generate substantial societal benefits. (M Watmough, CWS)

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Recommendation 3

Continue the National Conservation Program

(critical piece overall for *conservation* partners).

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Recommendation 4

Complete the essential components of Human Dimensions work in Canada – will help to guide integration process (e.g., build support for conservation). [Hunters, birders, conservation supporters and general public.]

QUESTIONS?