



prairie habitat  
*joint venture*

Wetland Policies, Regulation and  
Science in Prairie Canada,  
Workshop 3-4 May 2016, Regina

# Federal Wetland Programs, Policy, and the PHJV

Bob Clark,  
Environment & Climate Change Canada



# Outline

- National perspective - wetlands
- North American Waterfowl Management Plan
- Prairie Habitat Joint Venture – Program Areas
- Current Issues within the PHJV
- Planning for the Future – Wetland Policy

Special thanks to Deanna Dixon, Dave Ingstrup,  
Pat Kehoe for ideas and slides.

# Canadian Wetlands Leadership Workshop



*April 30 and May 1, 2014 | Sheraton Hotel Ottawa*



# Wetland Loss Continues Despite Benefits

- economic value to all Canadians = \$20 billion/year\*
- surface water storage and flood reduction
- water filtration and nutrient removal
- carbon storage
- wildlife habitat



\* "Wetland Stewardship: New Directions" 2003

## Canada's Wetlands



# WETLANDS STEWARDSHIP

## NEW DIRECTIONS

Final Report of the Conference  
Wetlands Stewardship

### VISION

**An increase in the quantity and quality of Canada's wetlands where the ecological and hydrological functions are maintained or enhanced for the sustainable use of Canadians and Nature.**

*Report No. 03-3*



*North American Wetlands Conservation Council (Canada)*

# Canadian Wetlands Roundtable - Steering Committee

- Canadian Federation of Agriculture
- Wildlife Habitat Canada
- CFPA
- Canadian Sphagnum Peat Association
- Canadian Association of Petroleum Producers
- Crop Life Canada
- BC Wildlife Federation
- Environment & Climate Change Canada
- Ducks Unlimited Canada
- Association of Fish & Wildlife Agencies



# Canadian Wetlands Roundtable

## Objectives

Inform and influence wetland policies that balance environmental, societal and economic considerations

Develop strategic partnerships for wetland stewardship nationally and internationally.

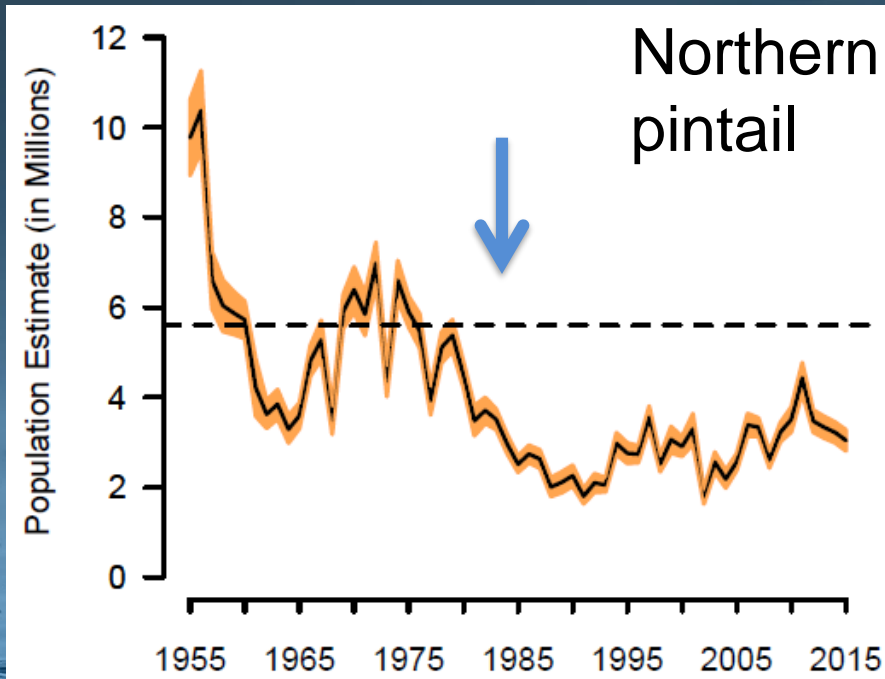
Communicate the importance of wetlands for the well-being of all Canadians.

# 1980s Drought – Formation of the North American Waterfowl Management Plan in 1986





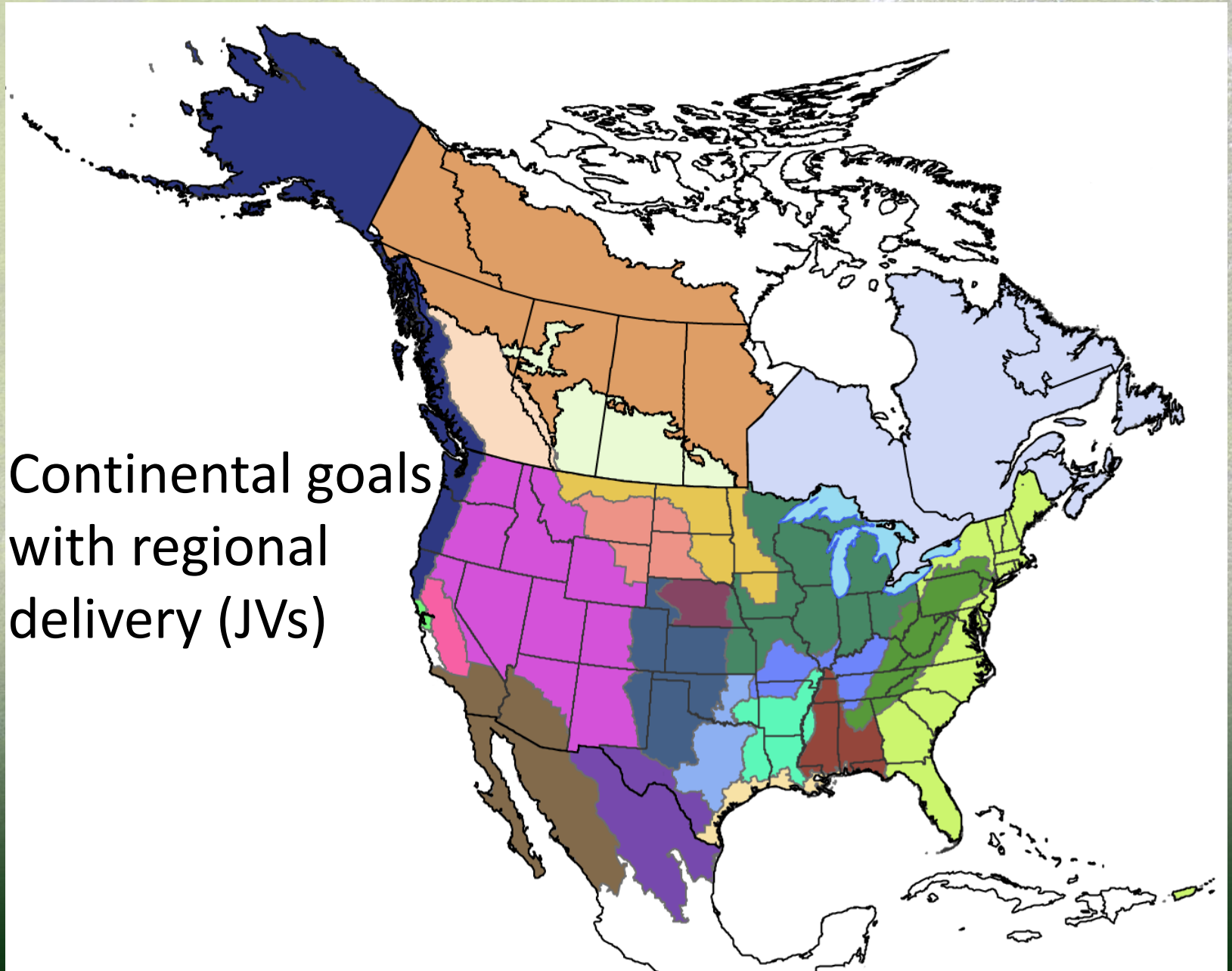
# North American Waterfowl Management Plan (1986)



- Concern for ducks, other species
- Plan launched unique partnership involving federal, provincial, state, NGOs of all three countries.

# NAWMP Habitat Joint Ventures (JV)

Continental goals  
with regional  
delivery (JVs)





# NAWMP, 30 Years of Success

## In Canada, 1986-2015

- 20M acres habitat secured (8M hectares)
- 138M acres habitat influenced (56.2M hectares)
- 3.5M acres habitat enhanced (1.4M hectares)
- 11M acres managed (4.4M hectares)

# NAWMP, 30 Years of Success

## In Canada, 1986-2015

**\$2,120M total contributions**

- \$540M U.S. Federal
- \$490M U.S. Non-Federal
- \$369M Canadian Federal
- \$323M Canadian Provincial and Territorial
- \$398M Canadian Other



# Prairie Habitat Joint Venture

- Founding JV, established in 1986
- Largest JV in Canada and one of the most important continentally
- Success of NAWMP depends on success in the PHJV
- 70% of total breeding ducks annually surveyed are recorded in the Prairie-Parkland Region and Western Boreal Forest area of Canada



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# PHJV PPR and WBF Program Area







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## PHJV Prairie Parklands:

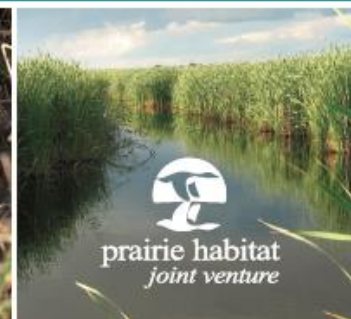
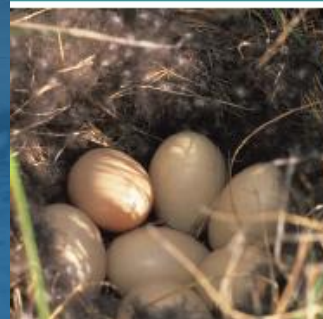
- Alberta
- Saskatchewan
- Manitoba
- Peace Parkland of BC
- 158M acres of land
- 82% of Canada's Ag lands
- 4.6M acres of wetlands in target areas
- **-0.3% annual wetland loss**

PLANNING FOR THE FUTURE



## PRAIRIE HABITAT JOINT VENTURE: THE PRAIRIE PARKLANDS

IMPLEMENTATION PLAN 2013-2020

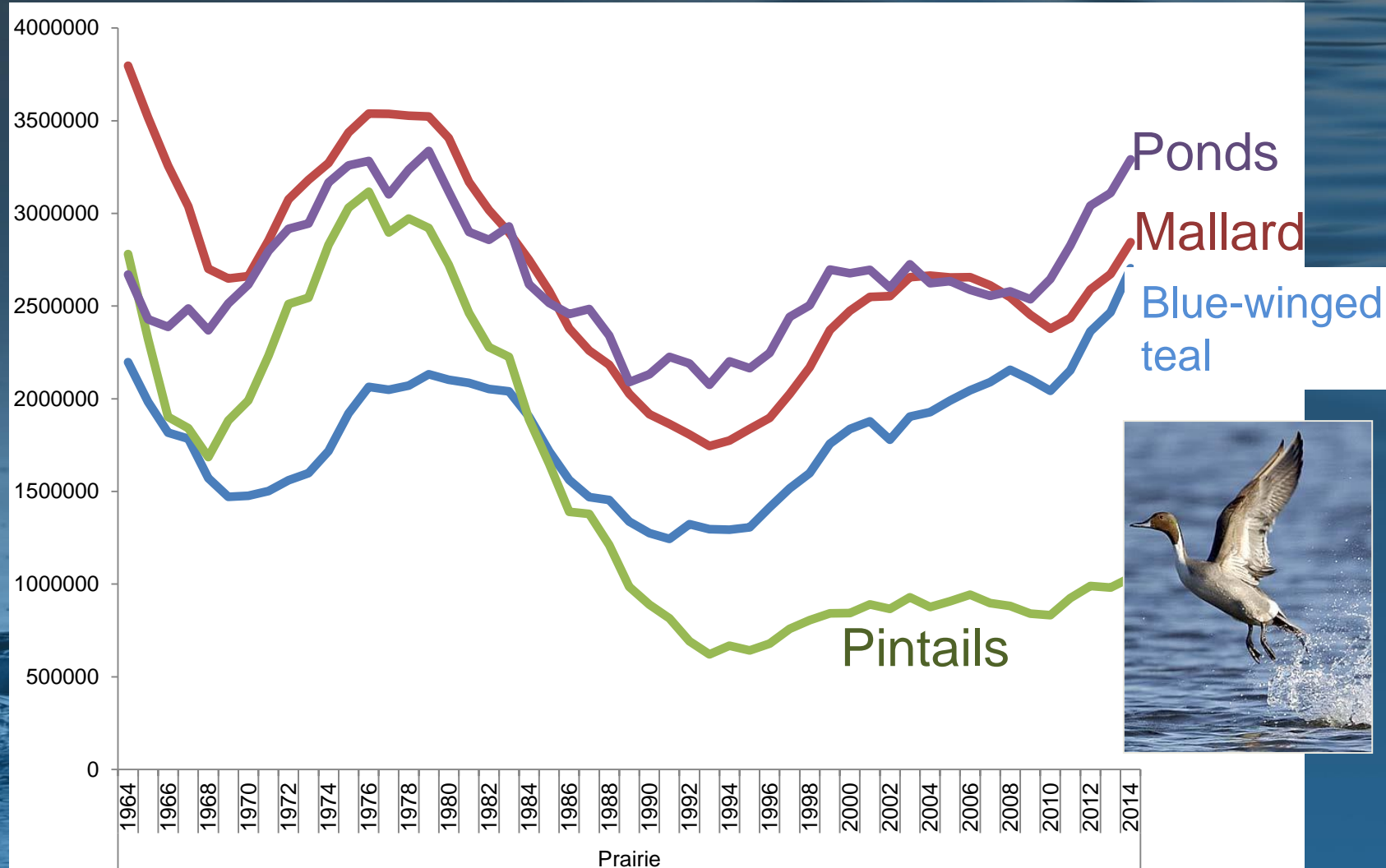




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# PPR - dabbling ducks and ponds

10-year running mean duck population sizes and pond counts



Year

Thanks to Blake Bartzen, CWS

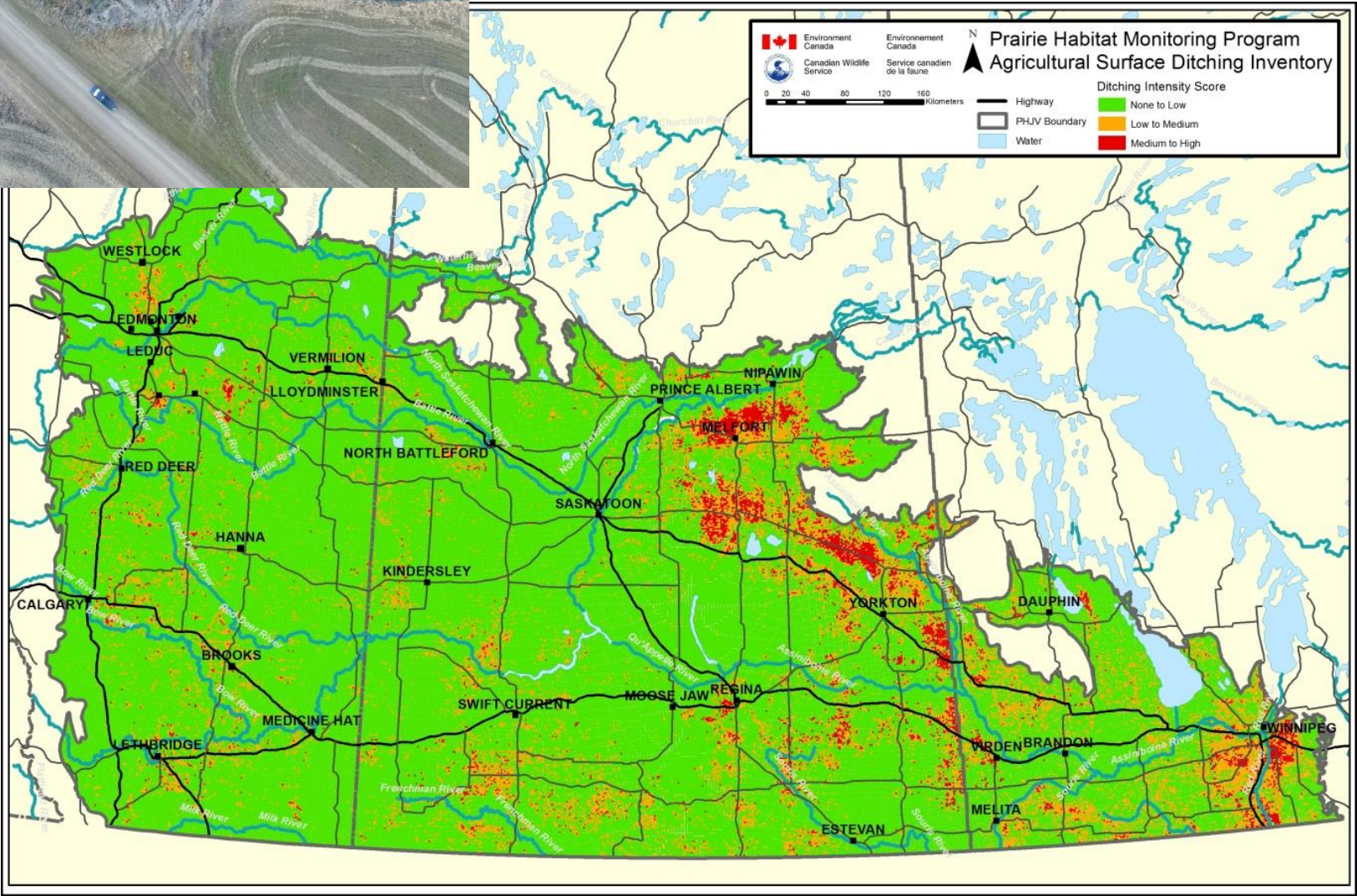


# PHJV Current Issues

- Issue: Habitat loss and fragmentation
  - 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.

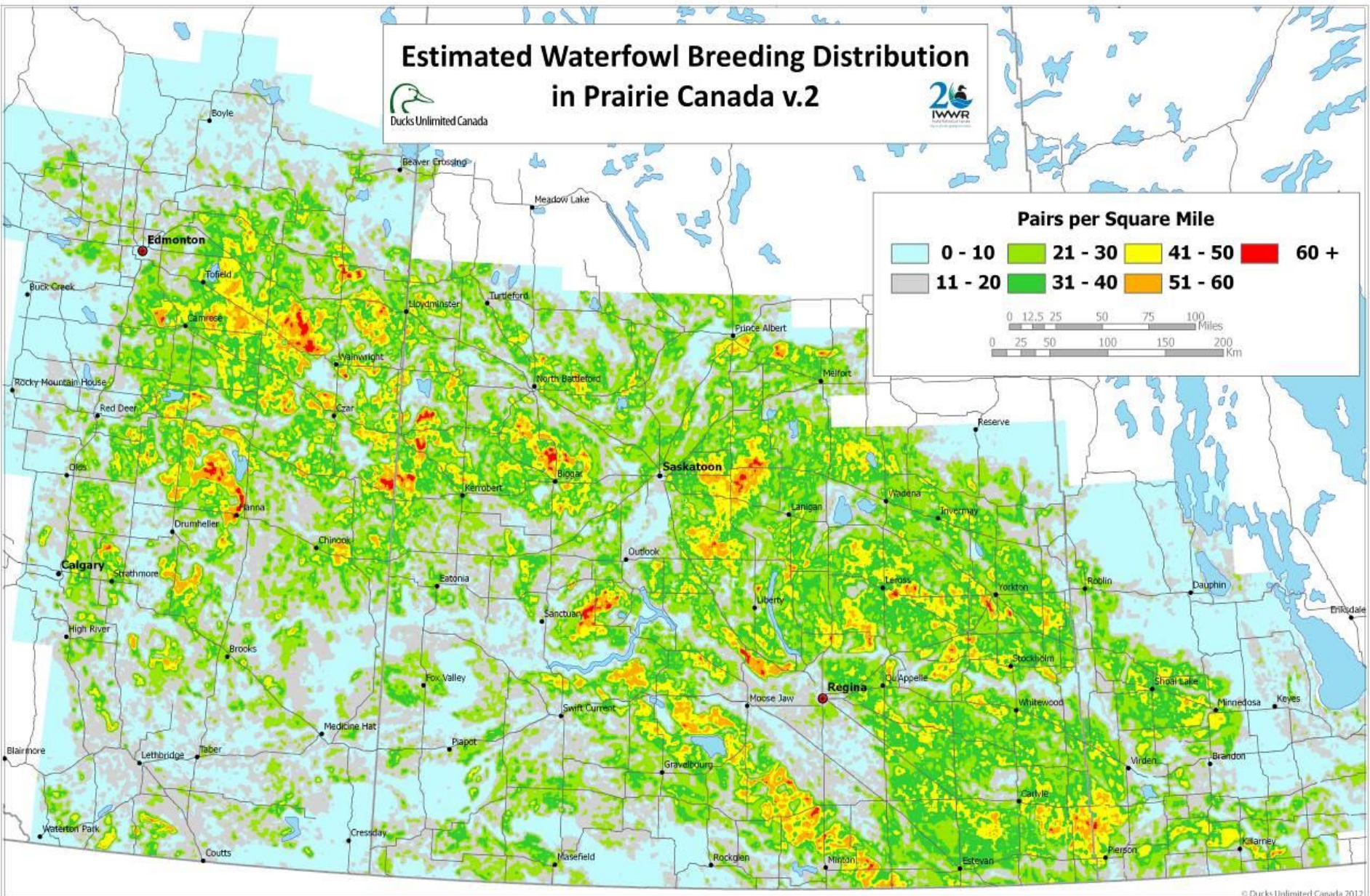
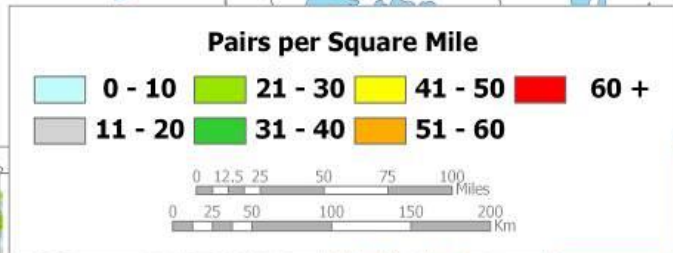
# Ditching inventory

M. Watmough, CWS





# Estimated Waterfowl Breeding Distribution in Prairie Canada v.2



© Ducks Unlimited Canada 2012

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

# PHJV Current Issues

## 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



# PPR Habitat Acre Objectives, 2013 to 2020

	Direct	Stewardship	
Habitat Restoration	NAWMP	NAWMP	Total
Winter Wheat	-	-	15-20% of all wheat acres
Tame Pasture	274,165	316,530	590,695
Tame Hay	73,828	324,758	398,586
Planted Cover	26,439	-	26,439
Wetlands	7,900	-	7,900
Nesting tunnels	1,360	-	1,360
<b>Sub-total</b>	<b>383,692</b>	<b>641,288</b>	<b>1,024,980</b>
Habitat Retention			
Wetland	343,402		
Upland	340,724		
<b>Sub-total</b>	<b>684,126</b>		<b>684,126</b>
<b>TOTAL HABITAT OBJECTIVES</b>			<b>1,709,106</b>



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## Western Boreal Forest

- Similar duck # to PPR, 4-5x the area
- 100M acres open water + 150M acres peatlands (& other wetlands)



PLANNING FOR THE FUTURE

### PRAIRIE HABITAT JOINT VENTURE: THE WESTERN BOREAL FOREST

IMPLEMENTATION PLAN 2013-2020





# WBF Cumulative Impacts

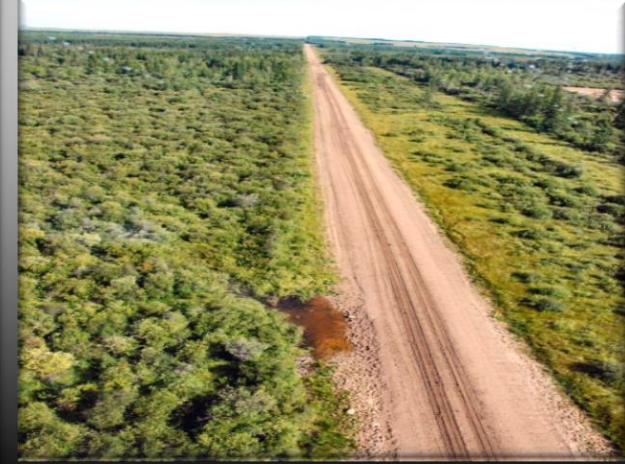
Fire Scars



Cutblocks



Roads



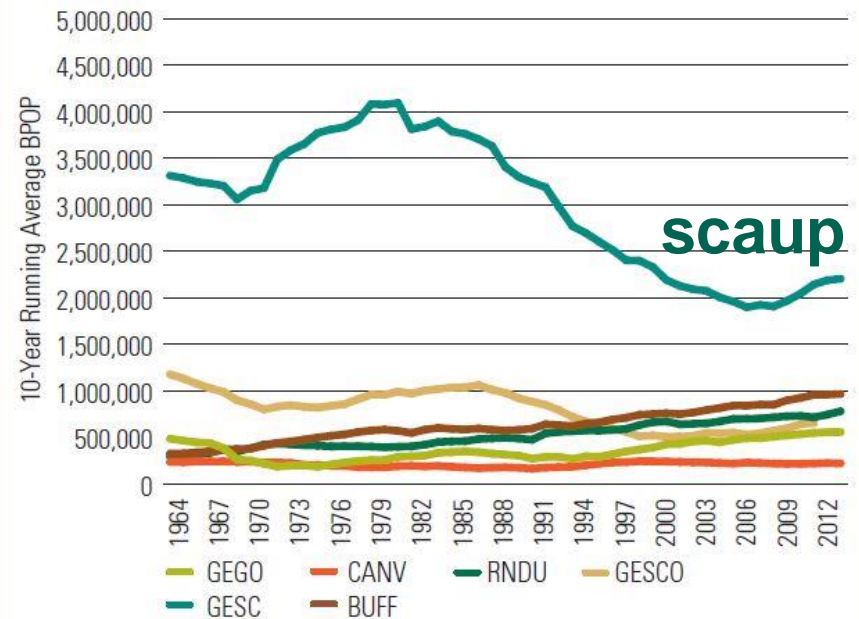
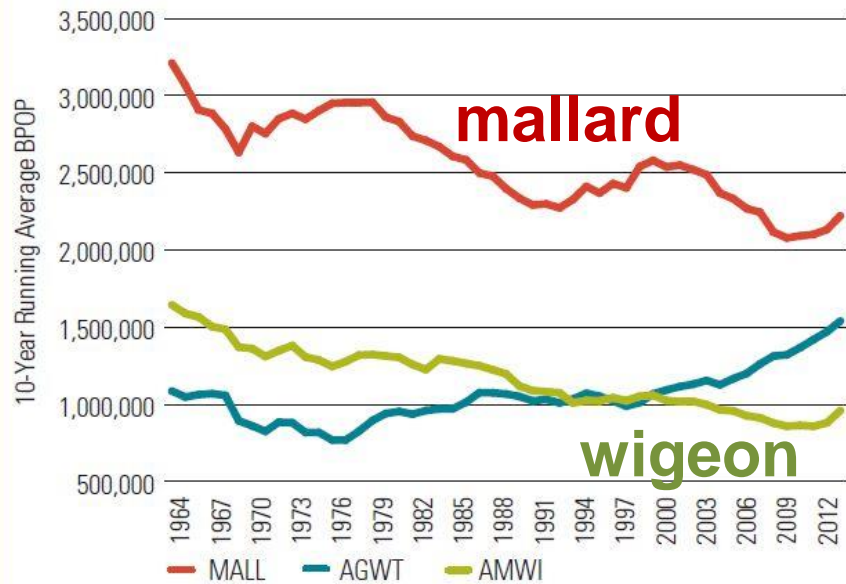
Oil/Gas Infrastructure



Boreal Forest Near Whitecourt, Alberta



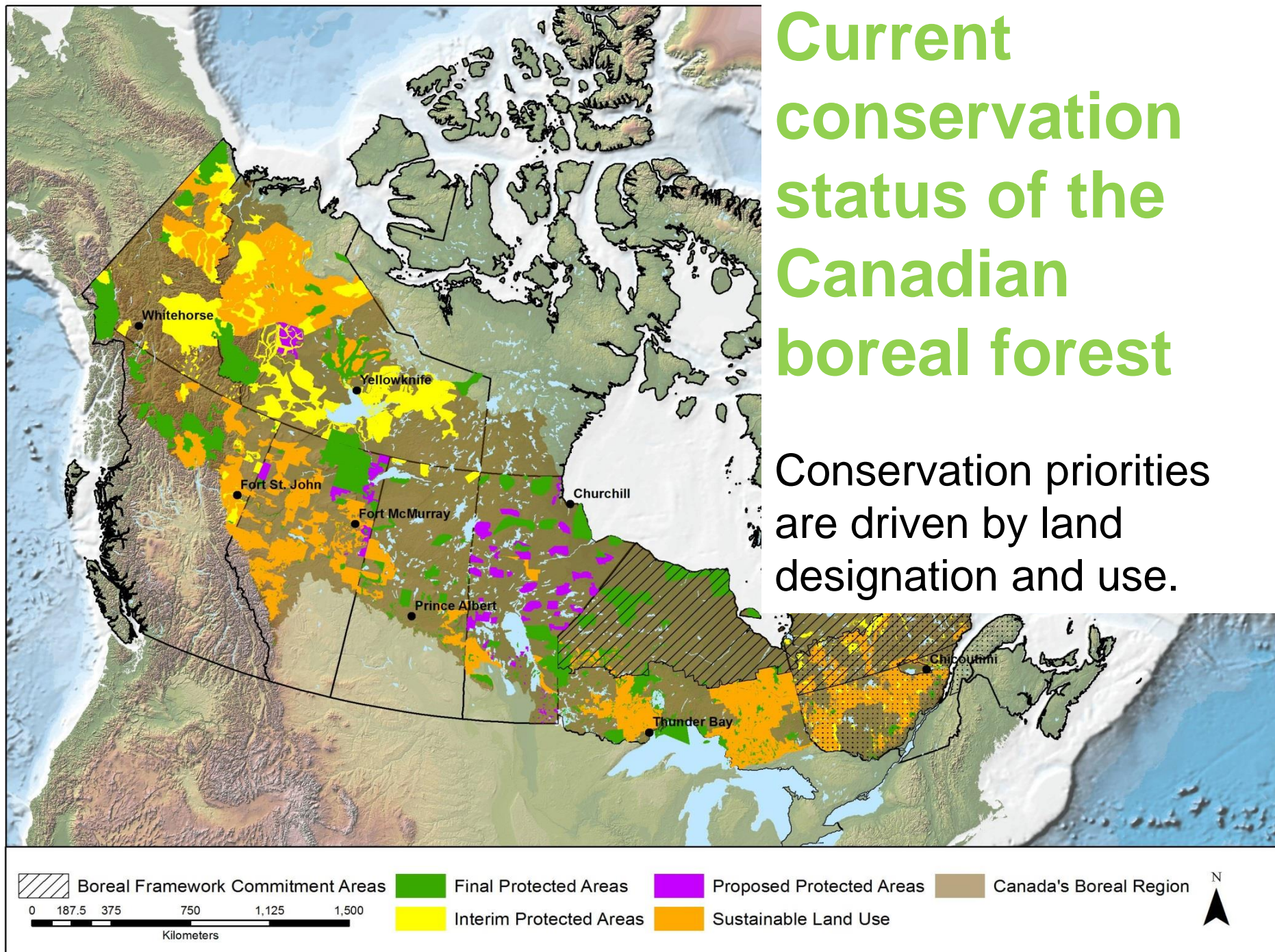
# WBF waterfowl trends





# Current conservation status of the Canadian boreal forest

Conservation priorities are driven by land designation and use.



# WBF Habitat Goals: Objectives, 2013 – 2020

**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 <sup>1</sup>	3.1	26.1	6.6
Saskatchewan	0.3	0.1	5.4	1.7
Manitoba	3.3 <sup>1</sup>	2.4	0.7	0.5
<b>Total</b>	<b>30.8</b>	<b>16.1</b>	<b>53.7</b>	<b>14.6</b>

<sup>1</sup>AB and MB are 92% and 29% accomplished as of 2013

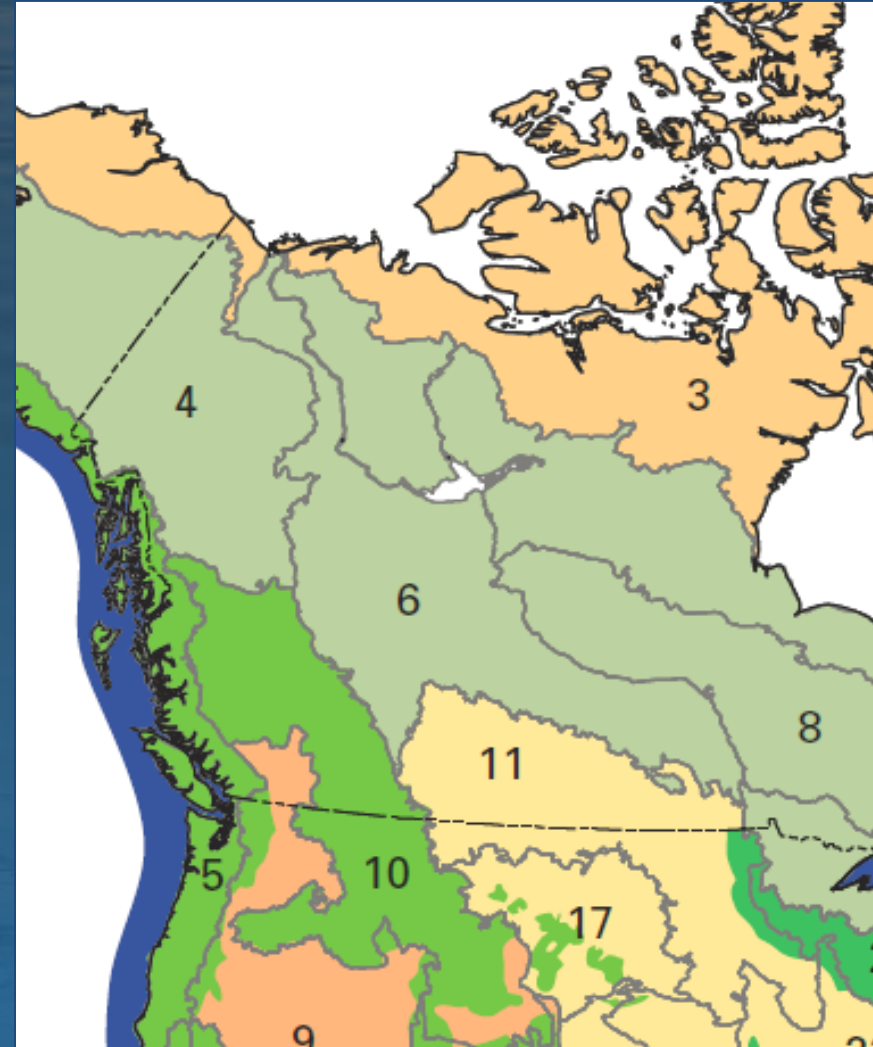




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# Non-game bird component

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



Bird Conservation Regions

# PPR & WBF Non-Game Bird Priority Species for Conservation

**Continue to move toward all-bird conservation**

**Western Boreal Forest:**

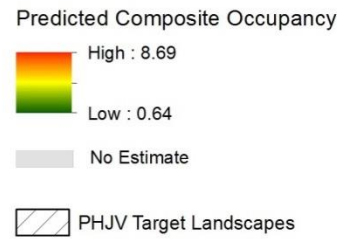
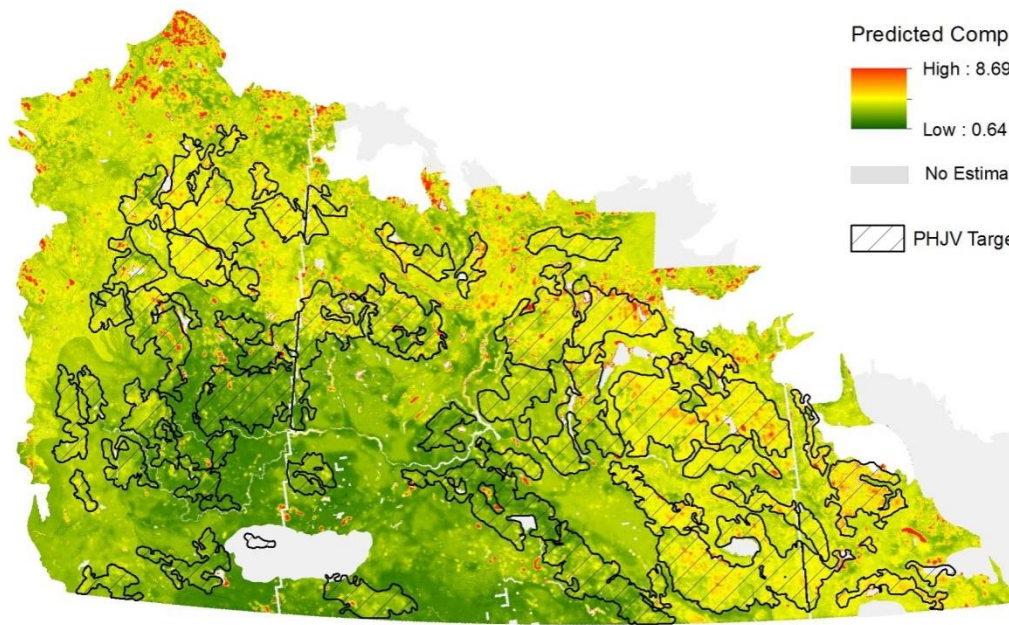
- 14 Shorebirds, 23 Waterbirds and 20 Landbirds
- 30 species are boreal specialists.

**Prairie Parklands:**

- 23 Shorebirds, 13 Waterbirds, 29 Landbirds
- 20 Species Listed under Canada's Species at Risk Act.







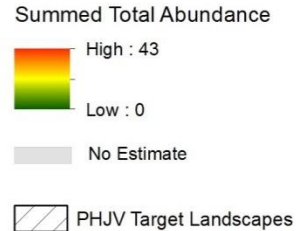
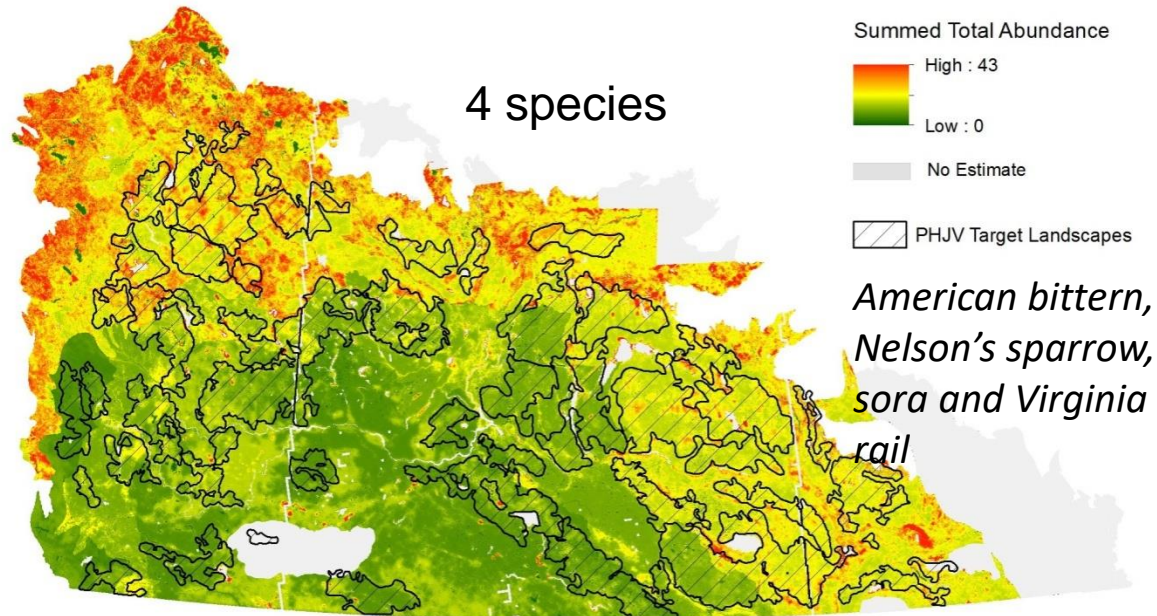
*American bittern, American coot, eared grebe, horned grebe, pied-billed grebe, red-necked grebe, Nelson's sparrow, sora, Virginia rail and Wilson's snipe*

Decision support tool (DST)  
for marsh bird species  
(K. Drake, Bird Studies Canada)

Predicted occurrences of 10 species.

## Next steps:

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



4 species

*American bittern, Nelson's sparrow, sora and Virginia rail*

Predicted abundances of 4 species.

# NAWMP, 2012 Revision

## Revised, Inter-connected Goals

- Abundant and resilient waterfowl populations to support hunting and other uses without imperiling habitat.
- Growing numbers of waterfowl **hunters**, other **conservationists**, and **citizens** who enjoy and actively **support** waterfowl and wetlands conservation.
- Wetlands and related habitats sufficient to sustain waterfowl populations at desired levels, while **providing** places to recreate and ecological **services** that **benefit society**.





Can we link our  
conservation actions  
to outcomes of greater  
relevance to more  
people?





# PHJV Planning for the Future

- Effective wetland policies that conserve habitat
- Population concerns for 5 duck species & 66 non-waterfowl species
- Wetland and upland inventories
- Impacts of future climate & land use changes on migratory birds
- Integrating HD in future plans

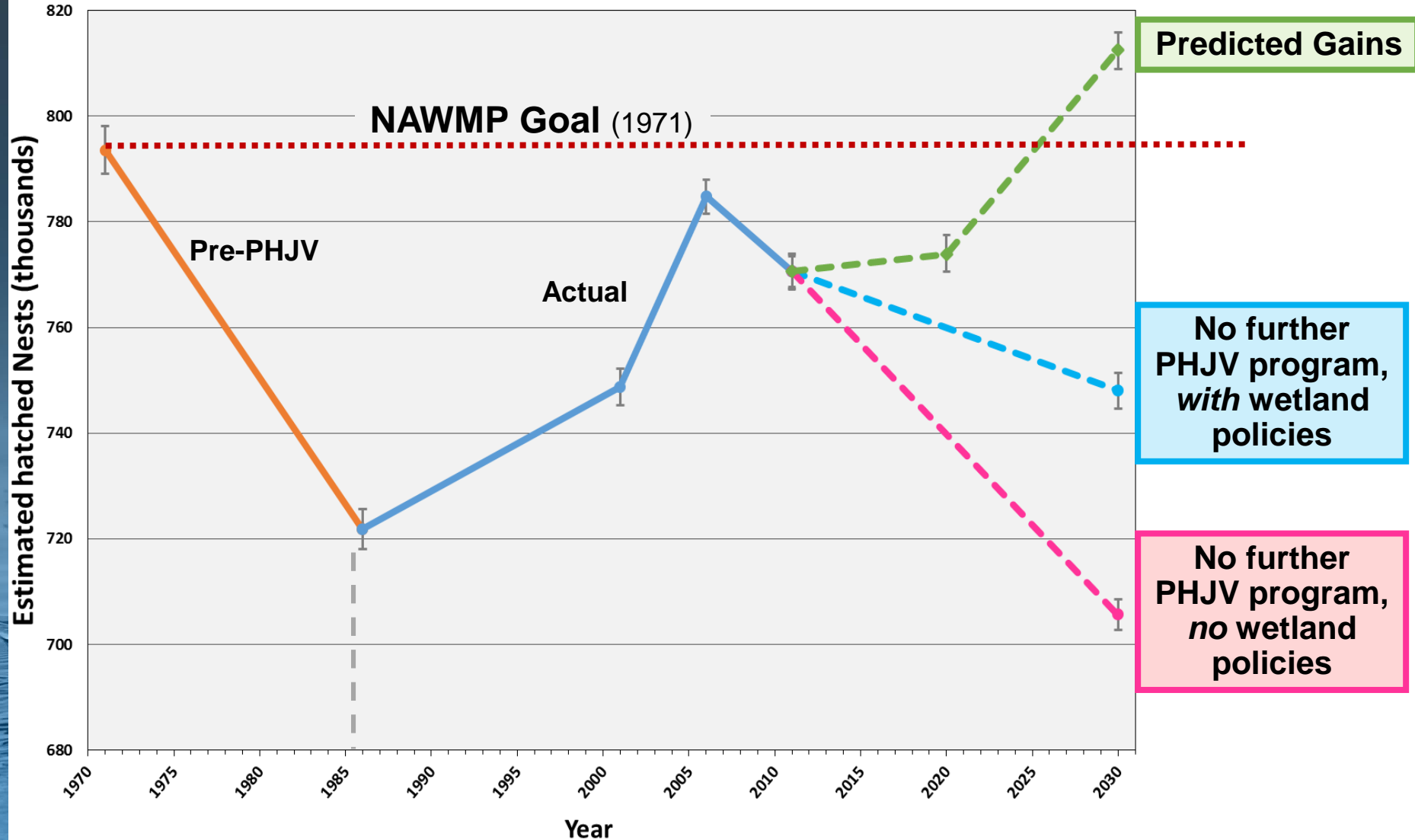






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# Projected impacts on (annual) duck productivity



Questions or comments?

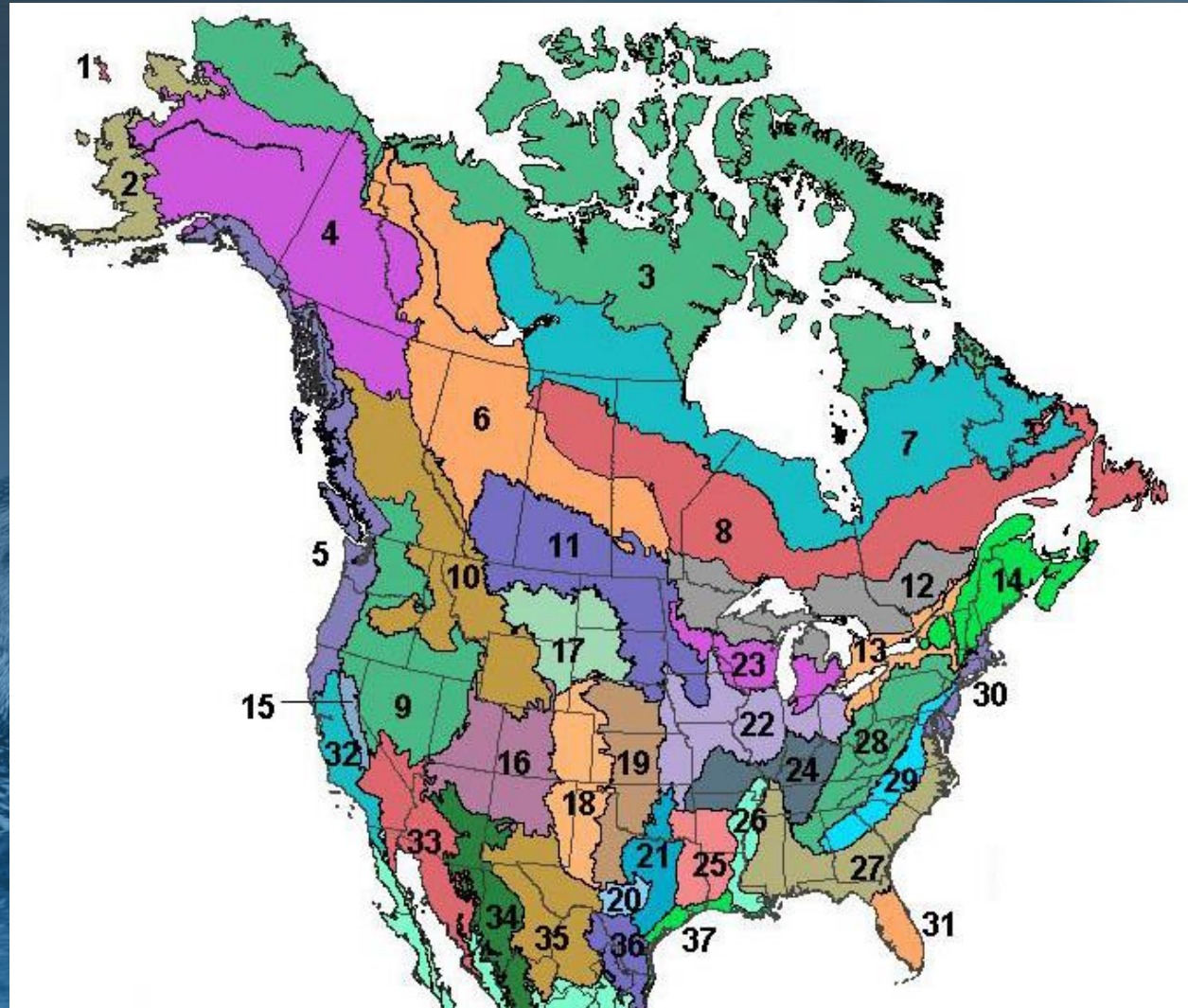






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# Bird Conservation Regions (BCR)







# Advancing Wetland Conservation in Canada

Pat Kehoe  
Director of International Partnerships  
Ducks Unlimited Canada

Building Canada's Wetland Industry



An aerial photograph of a vast, lush green wetland. A winding waterway or channel cuts through the dense vegetation, reflecting light and creating a contrast with the surrounding green. The texture of the wetland appears intricate and organic.

# What's Been Done

**Building Canada's Wetland Industry**



# Acknowledgements

## Our Major Partners

- U.S. Fish and Wildlife Service
- North American Wetlands Conservation Council - NAWCA
- Canadian Federal departments
- State, Provincial, Territorial, 1<sup>st</sup> 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



## PHJV Board

- **David Ingstrup** Environment Canada (Canadian Wildlife Service)
- **Travis Ripley**, Alberta Environment & Parks and Alberta NAWMP
- **Lyle Saigeon**, Saskatchewan Environment
- **Glen McMaster**, Saskatchewan Water Security Agency
- **James Duncan**, Manitoba Conservation and Water Stewardship
- **Tim Sopuck**, Manitoba Habitat Heritage Corporation
- **Scott Stephens**, Ducks Unlimited Canada
- **Kevin Teneycke**, Nature Conservancy of Canada

**PHJV Science Committee, Policy Committee, & Communications Committee PLUS Provincial Implementation Teams**

PHJV Coordinator: [deanna.dixon@canada.ca](mailto:deanna.dixon@canada.ca)

[www.PHJV.CA](http://www.PHJV.CA)

# Reactive

- 1930s Drought – Ducks Unlimited Canada (1938)
- Drought proofing the prairie



What's Been Done



# Proactive

## 1990s

- Brundtland Commission report *Our Common Future*
- Sustaining Wetlands Forum
- Canadian Wetlands Conservation Task Force
- Federal Policy on Wetland Conservation
- Canada's Minister of the Environment establishes the North American Wetlands Conservation Council (Canada)

What's Been Done



Enactment of the  
*North American Waterfowl Conservation Act*  
in 1989 – A unique funding mechanism

- Early example of payment for ecological goods and services export products from wetlands

What's Been Done



# NAWCC Canada

- Formed 1990 to administer the NAWMP and advance wetlands conservation nationally
- Predominantly Government and ENGO's associated with NAWMP delivery
- Highly successful partnership in direct habitat conservation
- Struggles with outreach (new partners and advancing policy reform)



An aerial photograph of a vast, lush green wetland landscape. A winding waterway, possibly a river or stream, flows through the center of the image, its surface reflecting the sky. The surrounding land is covered in dense, vibrant green vegetation, likely marsh grasses or reeds. The overall scene conveys a sense of natural beauty and ecological health.

# The Future of Prairie Wetlands is in Our Hands



# Steering Committee

- CFA
- CFPA
- Canadian Sphagnum Peat Association
- CAPP
- Crop Life Canada
- BC Wildlife Federation
- WHC
- EC
- NB DNR
- AFWA



# Collaboration

- The Roundtable and NAWCC Canada have developed complementary Terms of reference and work plans
- NAWCC Canada
  - coordination of NAWCA funding
  - advancing science and technology (Incl. Inventory)
  - communications and education associated with NAWCA and NAWMP programs in Canada.
- Canadian Wetlands Roundtable
  - broadening the partnership
  - advancing policy
  - wetland science and technology (esp. Economic evaluation of EGS)
  - communications and education of broader wetlands conservation issues and needs.



# Broadening the Partnership

- Agriculture
- Forestry
- Mining
- Peat Harvesting
- Oil and Gas
- Aggregate
- Insurance
- Construction
- Engineering Consultants
- Wetland Restoration / Construction
- Chemical and BioTechnology
- Outdoor Recreation
- Conservation
- Academia



# Proposed workshops

- To be planned for 2016
- Status and needs re:
  - Wetland Inventory
  - Contemporary Wetland Policy in Canada
  - Current Evaluation of Wetland EGS



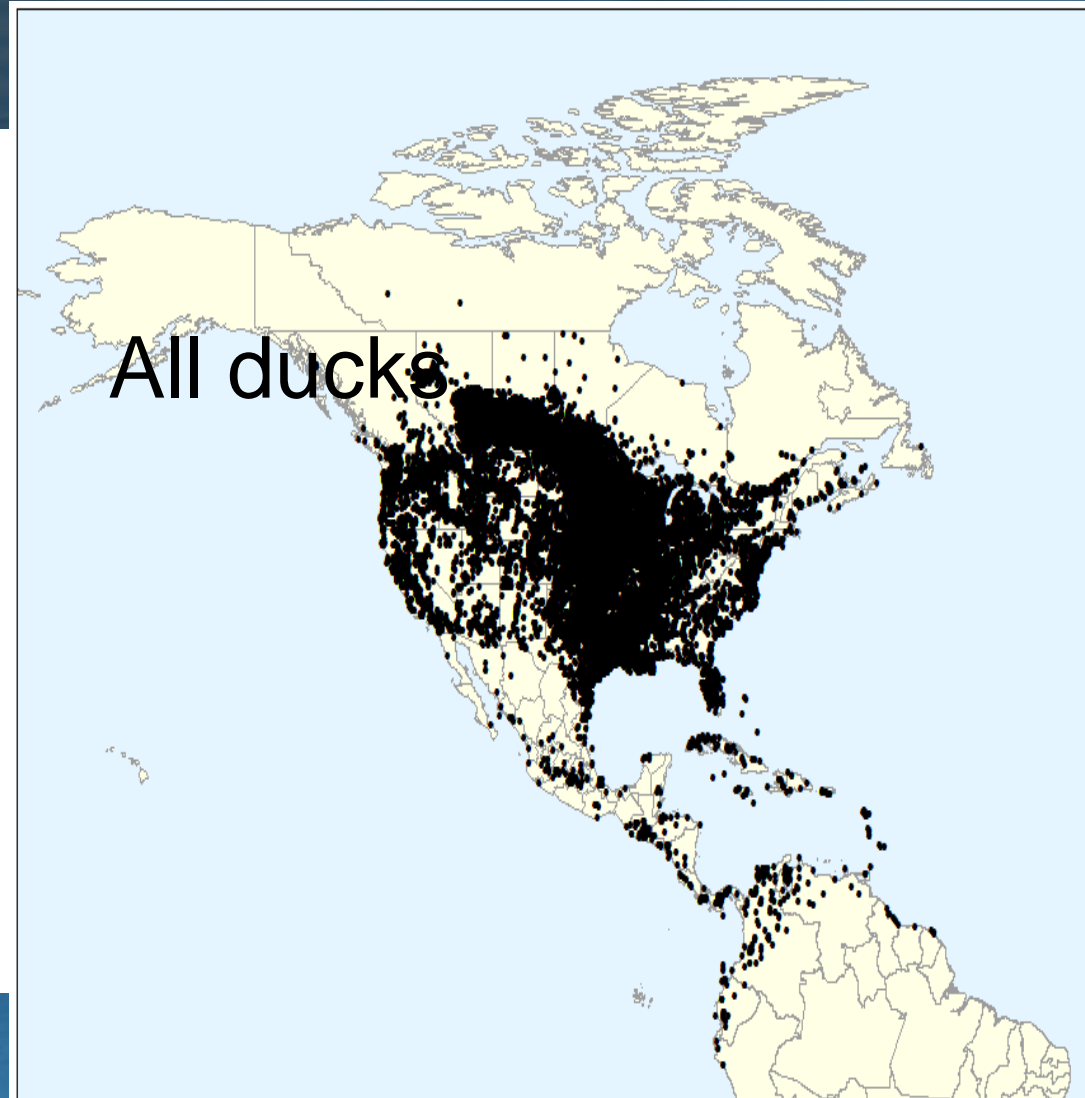
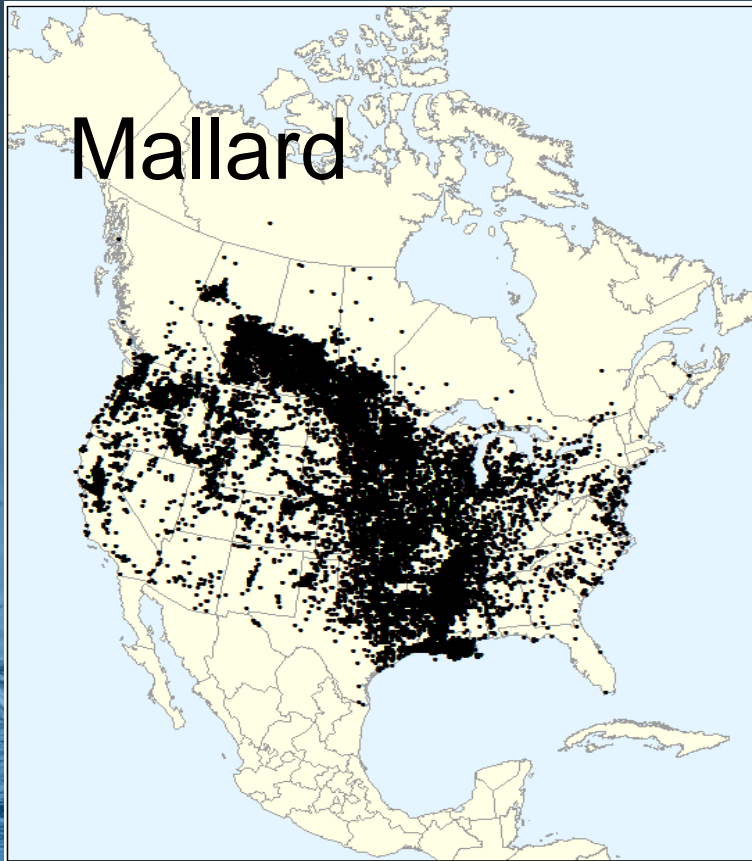
# REVIEW FOCUSED ON “IMPLEMENTATION STRATEGIES”

1. Policy framework in support of Canada's Wetland Vision
2. Governance structure to facilitate wetland conservation
3. Capacity – resources, science, knowledge, tools – to fulfil Canada's Wetland Vision
4. National inventory of Canada's wetlands
5. Integrated watershed management across Canada
6. High level of wetland literacy among Canadians
7. Thriving and sustainable wetland industry



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





# Canadian Wetlands Roundtable

## Vision

Sustainability through Responsible Management of Canada's Wetlands

## Mission

Secure Canada's position as a global leader in the responsible management, use and conservation of wetlands based on sound science.

## Objectives

Inform and influence wetland policies that balance environmental, societal and economic considerations

Develop strategic partnerships for wetland stewardship nationally and internationally.

Communicate the importance of wetlands for the well-being of all Canadians.

## Knowledge Creation

## Strategies

## Knowledge Dissemination

- Identify knowledge gaps for improved wetland conservation.

- Promote the measurement of and reporting on progress in wetland conservation.

- Work in collaboration with NAWCC (Canada) to support and guide the advancement of wetland science.

- Develop, monitor and promote effective wetland conservation initiatives and management practices nationally and internationally.

- Work with government, industry and stakeholders to develop new or enhanced options that support wetland conservation and sustainable use.

- Develop a credible voice to government on wetland issues and conservation value

- Develop effective communication tools to inform industry and public about wetland value and importance of conservation.

## Outcomes

Wetland conservation solutions (legislative, policy, BMPs etc.) are practical and implementable and built on objective and credible information and science.

Communication and messages on wetland conservation and sustainable use from roundtable and stakeholders are clear and consistent.

Industries and public that understand the value of wetlands and take action to conserve them

# NAWMP

- Has long recognized long term success is not possible without policy reform
- Some progress has been made, but slow relative to JV needs
- New approach needed as habitat continues to be lost in critical areas despite positive impacts of direct programs





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Large ditch  
network to  
drain  
multiple  
semi-  
permanent  
wetlands.

## Example: PPR Wetland Drainage

