

North American Waterfowl Management Plan



ALBERTA NAWMP PARTNERSHIP

2021/2022 PROGRESS REVIEW

APRIL 2021 TO MARCH 2022

CONTENTS

Preface: Increasing understanding and action	1
NAWMP in Alberta	2
Who is Alberta NAWMP?	З
New Tools for Conserving Non-Game Birds in the PHJV	4
Videos Support an Award-Winning Field Guide	5
Boreal Wetland Centre: A Nexus for Knowledge-Sharing	6
World Wetlands Day 2022: A Call to Action	7
Wetland Field Trips Go Virtual	8
Committee Reports, 2021-22	9
Contributions to NAWMP in Alberta, 2021-22 and 1986-2022	10
Activity Expenditures and Habitat Accomplishments, 2021-22 and 1986-2022	12
A Heartfelt Thanks to Our Cooperators	13

DC



DC

DC

CITATION:

Alberta NAWMP Partnership. 2022. Alberta NAWMP Partnership 2021-2022 Progress Review: April 2021 to March 2022. Ducks Unlimited Canada, Edmonton, AB. Alberta NAWMP-073.

Copyright © 2022 Alberta NAWMP Partnership

Printed in Canada

Cover photo credit: Ducks Unlimited Canada

Photo credit abbreviations used in this publication are defined on the inside of the back cover.

PREFACE: INCREASING UNDERSTANDING AND ACTION

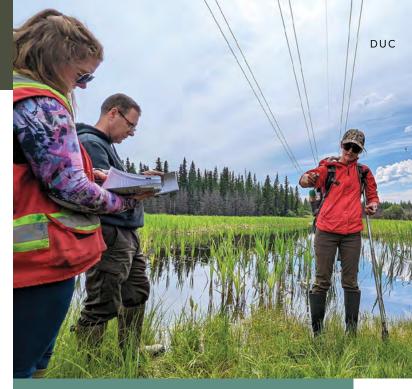
The latest update to the North American Waterfowl Management Plan (NAWMP) includes a heightened emphasis on the human dimensions of conserving waterfowl and their key habitats. Given the formidable threats to bird habitat on our continent and our planet, the need to get as many people as possible engaged in habitat conservation is crystal clear.

As a result, the Alberta NAWMP Partnership is increasingly pursuing opportunities to get all hands on deck for waterfowl habitat conservation in Alberta. The articles in this Progress Review feature some great examples of what we are doing to increase understanding among diverse stakeholders – students, land managers, resource companies, local communities, environmental professionals, the public, scientists – and encourage them to take actions to conserve wetland and upland habitat in Alberta.

In *World Wetlands Day 2022: A Call to Action*, we highlight the 2022 World Wetlands Day Symposium. This annual event is held every February 2 on World Wetlands Day (WWD). It brings together key stakeholders in wetland science, policy development and practice across western Canada. Alberta NAWMP was a hosting-partner of the 2022 Symposium. The presentations encompassed initiatives involving a wide range of players who are working to save our wetland ecosystems, aptly capturing the WWD global theme for 2022: Wetlands Action for People and Nature.

Accurate wetland classification is the first step in avoiding or minimizing wetland impacts for anyone working on the landscape, but it can be challenging. So, Ducks Unlimited Canada (DUC), one of the Alberta NAWMP Partners, led the development of the Alberta Wetland Classification System Field Guide. This easy-to-use guide is suitable for wetland practitioners, as well as landowners and the public. In *Videos Support an Award-Winning Field Guide*, we learn about two Alberta NAWMP-funded videos that showcase the guide and boost understanding of Alberta's wetlands and the functions they serve.

Boreal Wetland Centre: A Nexus for Knowledge-Sharing explores an outdoor, hands-on site for boreal wetland training, research, demonstration and knowledge-exchange. DUC is now managing this Centre, which aims to provide a safe space for the public, governments, communities, NGOs and resource companies to have open and honest discussions about issues like sustainable development, wetland conservation, climate change and reconciliation. This past year, a new three-year funding commitment was made by several industry partners, which will allow the Centre to continue operations and enable knowledge exchange-focused improvements.



"THE NEED TO GET AS MANY PEOPLE AS POSSIBLE ENGAGED IN BIRD HABITAT CONSERVATION IS CRYSTAL CLEAR."

In *Wetland Field Trips Go Virtual*, we find out about a long-term collaboration between Bow Habitat Station (BHS) and DUC. BHS is a top public environmental education facility of Alberta Environment and Parks, another Alberta NAWMP Partner. Usually, DUC and BHS join forces to hold in-person wetland field trips at the station, including the Wetland Discovery Day program for Grade 5 students. Since 2020, Wetland Discovery Day has been delivered virtually – with the help of Alberta NAWMP funding. Like the in-person program, the live, interactive webinars increased students' knowledge of wetland ecosystems with the goal of creating a passion for wetland stewardship among Alberta's youth.

Along with encouraging stakeholders to take action on habitat conservation, the Partnership is keenly interested in making the most of its own conservation efforts. These efforts come under the umbrella of the Prairie Habitat Joint Venture (PHJV), the regional NAWMP partnership. The PHJV is currently striving to refocus delivery of Prairie waterfowl habitat conservation activities in ways that also provide enhanced benefits for other birds. *New Tools for Conserving Non-Game Birds in the PHJV* outlines some innovative modelling that has generated new spatially-specific targets for conserving non-game bird habitat. These new targets could be especially crucial in helping to conserve grassland birds, whose numbers have been plummeting in North America.

On behalf of Alberta NAWMP, I thank the many agencies and individuals who share our passion for conserving wetland and upland habitat and helped make this past year a success.

I am pleased to present the Alberta NAWMP Partnership 2021-2022 Progress Review.

Travis Ripley

Chair, Board of Directors Alberta NAWMP Partnership

NAWMP IN ALBERTA

The North American Waterfowl Management Plan (NAWMP) is a landmark partnership between Canada, the United States and Mexico for habitat conservation to sustain continental waterfowl populations.

Created in 1986, NAWMP defines and prioritizes geographic regions across the continent based on their biological values for waterfowl and other wetland-associated birds. Its initiatives address regional and continental priorities, using a collaborative approach at local, regional, national and international levels.

NAWMP achieves its goals through voluntary regional partnerships that implement local actions. The Prairie Habitat Joint Venture (PHJV) is the regional NAWMP partnership with responsibility for prairie, parkland and boreal landscapes in western Canada. Combined, these landscapes are the most important waterfowl breeding areas in North America. They contain some of the most productive waterfowl areas in the world. Conserving these landscapes is vital to the maintenance and recovery of mid-continent waterfowl populations.

Since its inception in 1986, the PHJV has developed a series of sciencebased Implementation Plans to guide its activities. The 2013-2020 plan continued the PHJV's long-term focus on conserving waterfowl populations and their key habitats, plus it added a heightened emphasis on engagement with hunters, other conservationists and the general public. The plan also formally added the Western Boreal Forest Region to the PHJV's longstanding focus on the Prairie and Parkland regions. And the plan increased the PHJV's attention on other types of birds, while maintaining its enduring commitment to waterfowl conservation.

In 2021-22, the PHJV worked with its provincial NAWMP organizations in Alberta, Saskatchewan and Manitoba to finalize the next Implementation Plan for the Prairie, Parkland and Western Boreal regions. The new plan will be available in 2022 on the PHJV website.

The Alberta component of the PHJV's Implementation Plan provides the springboard for the Alberta NAWMP Partnership's activities. The Partnership is composed of three government and two non-government organizations. It is directed by a Board of Directors and a Management Committee, which are advised by Policy and Communications subcommittees. The board and committee members are mainly drawn from the five Partner agencies.

Alberta NAWMP coordinates joint projects, communications, planning and policy support, and facilitates funding options among the Partners. It supports Partner activities through technical and logistical assistance and by advancing innovative ideas through facilitation, funding support and capacity building.

ALBERTA NAWMP (PHJV) VISION

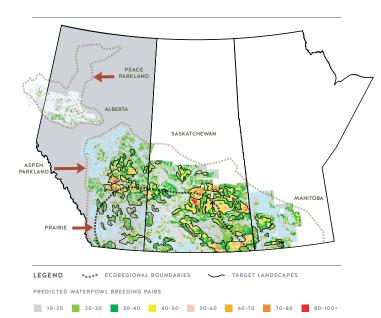
HEALTHY PRAIRIE, PARKLAND AND BOREAL LANDSCAPES THAT SUPPORT SUSTAINABLE BIRD POPULATIONS AND PROVIDE ECOLOGICAL AND ECONOMIC **BENEFITS TO SOCIETY.**

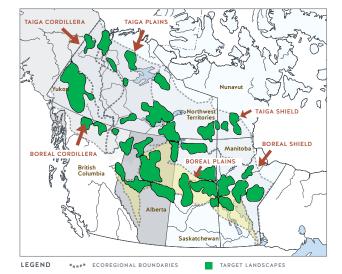
ALBERTA NAWMP (PHJV) MISSION

PROVIDE LEADERSHIP TO ACHIEVE HEALTHY AND DIVERSE WATERFOWL AND OTHER **BIRD POPULATIONS THROUGH CONSERVATION PARTNERSHIPS.** THESE PARTNERSHIPS STRIVE FOR SUSTAINABLE AND **RESPONSIBLE MANAGEMENT OF** THE LANDSCAPE TAKING INTO ACCOUNT SOCIAL, ECONOMIC AND ENVIRONMENTAL FACTORS.

PRAIRIE/PARKLAND TARGET LANDSCAPES







WHO IS ALBERTA NAWMP?

The Alberta NAWMP Partnership's successes in wetland and waterfowl conservation spring from the synergy of working together. The Partnership is composed of one federal and two provincial government departments and two non-government organizations that all have a responsibility for Alberta's wetlands as part of their mandates.

The five Partners continually seek opportunities to work with each other and with regional and municipal organizations and other stakeholders. These collaborative networks enhance existing wetland and upland stewardship efforts, launch innovative initiatives that otherwise might not happen, and build interest in and capacity for wetland and upland conservation.

Together, the Partners and their collaborators are making exciting progress on shared conservation goals.

HOW WETLAND LANDSCAPES RELATE TO EACH PARTNER AGENCY'S ROLES, OBJECTIVES AND RESPONSIBILITIES:

GOVERNMENT

Alberta Environment and Parks (AEP) is the lead provincial agency responsible for the stewardship of Alberta's air, land, water and biodiversity. AEP administers the Alberta Wetland Policy, the objective of which is to conserve, restore, protect and manage Alberta's wetlands to sustain the benefits they provide to the environment, society and economy.

The Alberta Ministry of Agriculture, Forestry and Rural Economic Development includes the Department of Agriculture, Forestry and Rural Economic Development and a number of agencies, boards and commissions. Among the Ministry's responsibilities are policies, legislation, regulations and services necessary for Alberta's agriculture, food and forest sectors to grow, prosper and diversify while supporting environmentally sustainable resource management practices. Key objectives include supporting primary producers' competitiveness through responsible resource management and protecting and enhancing the health of Alberta's forest resources.

Environment and Climate Change Canada is the lead federal department for a wide range of environmental issues. The department's programs focus on minimizing threats to Canadians and their environment from pollution, and conserving and restoring Canada's natural environment, including water, air and soil quality.

PRIVATE, NON-PROFIT

Ducks Unlimited Canada (DUC) is a registered charity that has over 80 years of experience in wetland conservation and restoration. DUC partners with government, landowners, industry, Indigenous peoples and non-profit organizations to conserve wetlands for the benefit of society, waterfowl, other wildlife and the environment.

Nature Conservancy of Canada, in partnership with corporations, governments, individual donors and landowners, works to achieve the direct protection of Canada's most important wild spaces through property securement and longterm stewardship of these properties. This work maintains critical lands and waters for wildlife and ensures clean air and water for our future generations.

ALBERTA NAWMP PARTNERSHIP COMMITTEES, 2021-22

BOARD OF DIRECTORS

Ron Bennett, Environment and Climate Change Canada Katelyn Ceh, Nature Conservancy of Canada (Incoming) Thorsten Hebben, Ducks Unlimited Canada Tom Lynch-Staunton, Nature Conservancy of Canada (Outgoing) Travis Ripley (Chair), Alberta Environment and Parks Jamie Wuite, Alberta Agriculture, Forestry and Rural Economic Development

MANAGEMENT COMMITTEE

 Ron Bennett, Environment and Climate Change Canada
 Kristen Lorenz, Alberta Agriculture, Forestry and Rural Economic Development
 Glenn Mack (Chair), Alberta Environment and Parks
 Dave Mussell, Alberta Environment and Parks (Outgoing)
 Nathalie S. Olson, Alberta Environment and Parks (Incoming)
 Alain Richard, Ducks Unlimited Canada (Boreal)
 Tracy Scott, Ducks Unlimited Canada (Prairie/Parkland)

POLICY COMMITTEE

Amanda Cooper, Alberta Environment and Parks (Incoming) Gerry Haekel, Alberta Environment and Parks Kalli Herlein, Alberta Environment and Parks (Incoming) Mark Lyseng, Alberta Beef Producers Glenn Mack, Alberta Environment and Parks Alain Richard, Ducks Unlimited Canada (Boreal) Tracy Scott (Chair), Ducks Unlimited Canada (Prairie/Parkland) Karen Sundquist, Alberta Agriculture, Forestry and Rural Economic Development Steve Wallace, Alberta Environment and Parks (Outgoing) Matthew Wilson, Alberta Environment and Parks (Outgoing)

COMMUNICATIONS COMMITTEE

Chantelle Abma, Ducks Unlimited Canada (Boreal) (Incoming) Joy Aguilar, Environment and Climate Change Canada Jennifer Golletz, Ducks Unlimited Canada (Prairie/Parkland) (Incoming) Cathy MacKenzie, Ducks Unlimited Canada (Prairie/Parkland) (Outgoing) Raina Mithrush, Ducks Unlimited Canada (Boreal) (Outgoing) Dave Mussell (Chair), Alberta Environment and Parks (Outgoing) Nathalie S. Olson (Chair), Alberta Environment and Parks (Incoming) Melissa Orr-Langner, Alberta Agriculture, Forestry and Rural Economic Development

Carys Richards, Nature Conservancy of Canada (Outgoing)

COORDINATOR

Greg Hale, Alberta NAWMP Partnership



NEW TOOLS FOR CONSERVING NON-GAME BIRDS IN THE PHJV

Thanks to some innovative modelling, the latest Implementation Plan (IP) of the Prairie Habitat Joint Venture (PHJV) now has spatially-specific targets for conserving non-game bird habitat to complement its waterfowl habitat conservation targets. As a result, the three provincial NAWMP groups will be able to boost the effectiveness of their efforts to conserve these other birds.

That could be crucial for grassland birds, whose numbers have been plummeting in North America. In Canada, grassland bird numbers have fallen by 57% since 1970, according to The State of Canada's Birds 2019.

The PHJV's interest in non-game birds is not new. "In its 1998 update, NAWMP broadened the horizon in terms of joint venture conservation to do the best job we can for other birds, while continuing to focus on waterfowl. That longstanding responsibility is something that we have been struggling with in the PHJV," notes Dr. Jim Devries with Ducks Unlimited Canada, who is Chair of the PHJV Science Team.

"For example, part of the PHJV's work from the very get-go has been restoring and conserving grasslands because that is where waterfowl nest. We are pretty sure those habitats have been benefiting other grassland birds [to some extent]. But until we had the targeting tools that Dr. Barry Robinson has now developed, it has been really tough to quantify where and how much habitat was needed for those other species."

The PHJV has been using – and refining – a decision support tool for spatially targeting waterfowl habitat conservation for many years. "We're using that tool as our blueprint for how to proceed for other birds," says

NEW SPATIALLY-SPECIFIC TARGETS FOR CONSERVING NON-GAME BIRD HABITAT WILL HELP ALBERTA NAWMP TO DO MORE FOR AT-RISK GRASSLAND BIRDS.

Robinson, who is with Environment and Climate Change Canada and a Science Team member.

First, Robinson and his group used a new technique developed by the Boreal Avian Modelling Project to combine data from more than 70,000 bird surveys that Robinson acquired from multiple sources. With that data, they created 'species density models' for each of 24 non-game bird species.

These models link landscape characteristics, like the amount of wetland, grassland, cropland, and so on, to bird populations. The model for each species generates a map that predicts the density of breeding individuals across the PHJV's Prairie/Parkland Region, with the population hotspots shown in red, like a weather radar map of scattered thunderstorms.

The researchers' next step was to sort the species into three groups: shorebirds, waterbirds and landbirds. Then they used modelling to identify high priority locations for habitat conservation for each group.

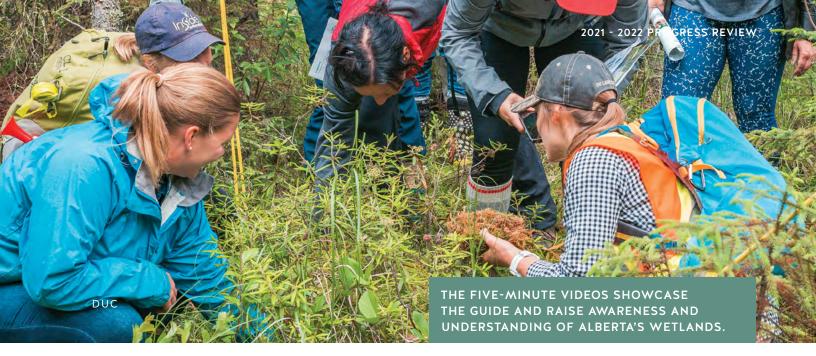
Because of grassland bird concerns, Robinson's group also conducted an additional analysis for the "Fab Four" of grassland songbirds: chestnutcollared longspur, thick-billed longspur, Sprague's pipit, and Baird's sparrow. These four species-at-risk seem to be especially impacted when grassland is converted to cropland, the main mechanism for grassland habitat loss. They used this analysis to set the objectives in the new IP for how much habitat to conserve to meet the population objectives for each of the four species.

The researchers estimate that grassland habitat in the Prairie/Parkland Region is being lost at a rate of about 1.3% per year. Using their models, they simulated the effects of this loss on the populations of the four birds, and then developed conservation recommendations.

"The short-term population objective for all four species is to reach population stability within 15 years. To stop those populations from declining, we need to conserve 4.4 million acres of grassland over the next 15 years throughout the three Prairie Provinces," explains Robinson.

"In the Implementation Plan, we have recommended which specific grasslands should be targeted for conservation to meet those 4.4 million acres. That recommendation is based on which areas are at most risk of loss and also which ones have the highest density of those four species."

These new spatially-explicit habitat objectives will help the NAWMP groups in Alberta, Saskatchewan and Manitoba to refocus their delivery of waterfowl habitat conservation in ways that will do more for other birds, especially at-risk grassland birds.



VIDEOS SUPPORT AN AWARD-WINNING FIELD GUIDE

Accurate wetland classification is essential for avoiding or minimizing wetland impacts when working on the landscape. And the Alberta Wetland Classification System Field Guide is a great tool for anyone interested in classifying Alberta wetlands.

Now two short videos are available to introduce this guide – and wetland classification – to potential users.

Kristyn Mayner, Wetland Stewardship Specialist with Ducks Unlimited Canada (DUC), led the development of the guide. She says, "Our goal overall was to create an easy reference, highly visual, field resource that could be used to identify and classify wetlands by professionals as well as the public and landowners. So, we gathered over 250 photographs and illustrations of wetlands and 80 of the most common wetland plant species, and we stuffed them all into a compact field guide!"

The guide follows Alberta Environment and Parks' Alberta Wetland Classification System, the standard for classifying wetlands in the province, but the guide makes that classification system much easier to apply in the field.

"It took us 2.5 years to complete the guide, mostly because we tried to involve Albertans as much as possible in the creation of the guide. We had a lot of outreach and engagement sessions early on to try to understand what people need to identify and classify Alberta wetlands in a more understandable way," says Mayner.

She adds, "The project would never have been possible if it hadn't been supported by Alberta Innovates, Alberta NAWMP Partnership, Prairie Habitat Joint Venture, and DUC; also, Alberta Environment and Parks was a steering committee member for us." Released in 2021, the field guide has already received some impressive commendations.

First, it won the 2021 Peggy Thompson Publication Award. This award aims to recognize and encourage high standards of achievement in publishing biological information and in conveying an understanding of the concepts and application of biological sciences.

Mayner notes, "One thing this award from the Alberta Society of Professional Biologists really demonstrated to me was that the professional biological/ecological community was endorsing our guide."

The guide was also shortlisted for a 2022 Alberta Emerald Award; it came second in the Water category. The Emerald Awards celebrate environmental excellence in the province.

As Mayner's team was finalizing the guide, they came up with the idea of creating two videos to showcase the guide and raise awareness and understanding of Alberta's wetlands and the functions they serve. Alberta NAWMP provided funding and feedback to help in developing these five-minute videos.

An Introduction to the Alberta Wetland Classification System Field Guide provides a clear, concise overview of the guide that features all five wetland classes and their key soil, vegetation and water characteristics. Mayner says, "In five minutes, you get an introduction to each of the five classes, with lots of imagery to get you started in understanding what they can look like."

Understanding Wetland Hydrology introduces wetland water level and water flow considerations, and highlights how wetland hydrology relates to wetland classification and to working in and around wetlands. She notes, "We were inspired to create that video because we had heard from many people that it can be really hard to visualize how wetlands can change as their water levels fluctuate."

To download the guide for free or purchase a hard copy, visit the DUC website. To participate in an outdoor or online wetland classification training session offered by Mayner's team, contact k_mayner@ducks.ca.



BOREAL WETLAND CENTRE: A NEXUS FOR KNOWLEDGE-SHARING

The Wetland Centre at Evergreen Park is unique in Canada as an outdoor, hands-on site for boreal wetland training, research, demonstration and knowledge-exchange. And now the Centre is entering into a cool new phase that will further strengthen its capacity for sharing knowledge among stakeholders.

The Wetland Centre grew out of activities at the Evergreen Learning and Innovation Centre (ELIC) site. This site is located on 22 forested/wetland acres in Evergreen Park, south of Grande Prairie, and is on Treaty 8 territory. The ELIC was founded in 2009 by the Evergreen Learning and Innovation Society. Since 2015, Ducks Unlimited Canada (DUC) has been involved with the ELIC, including work to map and monitor the site's wetlands.

In 2018, the society and DUC launched a three-year project to establish the Wetland Centre at the site. With the help of several collaborators, they developed a wetland trail system with interpretive signs, revamped some existing industryrelated demonstrations at the site, and initiated multiple wetland and wildlife monitoring and research studies, including citizen-science opportunities.

These days, over 2,000 people come to the Centre each year for tours and knowledge-sharing sessions. The trail system offers first-hand learning about boreal wetland ecosystems and practices like road design and wetland restoration so visitors can gain a better understanding of innovative methods for stewardship and sustainable resource development in the Boreal Region.

"This past year marked an exciting turning point in DUC's engagement with the site," notes Leanne Mingo, DUC Conservation Programs Specialist for the Best Management Practices Program. "Management of the site was officially transferred to DUC, and a three-year funding commitment was made by multiple partners." Those partners include the Forest Resource Improvement Association of Alberta, TC Energy, Alliance Pipeline and Hammerhead Resources.

Mingo explains, "The new funding will allow operations at the site to continue while also enabling knowledge exchangefocused improvements like the addition of an outdoor classroom, trail and signage upgrades, and resources to hire a full-time DUC staff member to oversee the Centre."

PARTNERING TO PROTECT WETLANDS

Another important step forward in DUC's boreal initiatives came in spring 2022 when DUC and Weyerhaeuser Company signed a five-year agreement. This new agreement marks the continuation of a long-time relationship between the two organizations. It sets out the framework for how Weyerhaeuser and DUC will work together on wetland and waterfowl stewardship across Weyerhaeuser's operating areas in the boreal and temperate forest regions of Alberta, British Columbia, Ontario and Saskatchewan.

The funding under this agreement will support various projects including: the continued development of best management practices to help protect natural habitat in these important working landscapes; an inventory of wetland carbon storage for effective carbon accounting; and the creation of a Wetland Stewardship Report which will identify areas for future collaboration and knowledge-sharing.

For more information, visit boreal.ducks.ca

"I think the value of the Centre is that it provides a safe space for the public, governments, communities, NGOs and companies to have open and honest discussions about, for example, sustainable development, wetland conservation, science, climate change and reconciliation," says Beverly Gingras, DUC's Head of Boreal Conservation Programs. "We want the Centre to be a welcoming place for people to get to know and learn from each other so that we can all achieve positive economic, social and cultural outcomes."

"The project truly is shaped by community needs and voices," adds DUC Conservation Programs Specialist Catherine Brown. "DUC plans to continue to honour this through meetings with the various advisory groups and ongoing conversations with partners, collaborators, members of the public and Indigenous community members."

With DUC's leadership and the new financial support, this boreal Wetland Centre can become a nexus for developing collaborative pathways toward sustainable boreal landscapes.

WORLD WETLANDS DAY 2022: A CALL TO ACTION

For the Alberta NAWMP Partnership, World Wetlands Day 2022 was a great opportunity to spread the word about the vital importance of wetland ecosystems, the ongoing threat of wetland loss and degradation, and the exciting wetland conservation work of the Partnership and other stakeholders.

World Wetlands Day (WWD) is celebrated around the world every February 2. This day marks the anniversary of the adoption of the Convention on Wetlands. Also known as the Ramsar Convention, this international agreement for wetland stewardship was established 50 years ago. Canada signed on to the Convention in 1981. Last year, the United Nations proclaimed World Wetlands Day as an official UN observance day.

Wetlands are definitely worth honouring. They perform crucial functions for people and our planet, like reducing the impacts of floods and droughts, improving water quality, providing wildlife habitat, and storing carbon.

Alberta NAWMP's Communications Committee leads the Partnership's WWD activities. For instance, each year, Alberta NAWMP places advertisements in Alberta newspapers to raise awareness about WWD, the need for wetland conservation, and the role of the Partnership and its collaborators in conserving and restoring wetland ecosystems in the province.

Also, in 2022, Alberta NAWMP was a hosting-partner of the World Wetlands Day Symposium. This annual event was initiated by the Institute for Environmental Sustainability (IES) at Mount Royal University (MRU) in 2019. The Symposium aims "to create a hub for wetland sustainability knowledgeexchange in Alberta, by gathering key stakeholders in wetland science, policy development and practice in Alberta and across western Canada to join the global celebration of World Wetlands Day," explains Dr. Felix Nwaishi, an Assistant Professor at MRU and WWD Symposium organizer.

The time to protect and preserve our wetlands is now.

<text><text><text><text><text><text>

Environment and Environmement et

Alberta NAWMP and Canada's Oil Sands Innovation Alliance partnered with MRU-IES to host the 2022 Symposium. This virtual event, held on February 2, focused on WWD's global theme for 2022: Wetlands Action for People and Nature.

Albertan

Nwaishi says, "This theme highlights a call to action on the mitigation of wetland losses through capital investment – human, political and financial capital – in wetland conservation and restoration."

The Symposium's nine presenters came from organizations like the UN's Global Peatlands Initiative, Ducks Unlimited Canada, Cows and Fish, Miistakis Institute, InnoTech Alberta, and World Wildlife Fund Canada. They spoke with participants on an array of fascinating topics such as: the importance of Canada's peatlands for people, nature and climate; wetland conservation in boreal communities; lessons learned from 30 years of working with communities, landowners, and land managers on riparian management; citizen-science data for the development of a conservation

framework to secure at-risk amphibians in a large city; using environmental DNA to monitor aquatic species in community-based projects; retaining wetlands in residential developments; and an overview of World Wildlife Fund Canada's 50 years of work on wetlands.

"The range of topics provided participants with a look at how the complex ecosystems that rely on wetlands are impacted by changes in wetland functionality," notes Nwaishi. "Presentations also highlighted the amazing work being done across Canada to protect and promote our wetlands."

He concludes, "The 2022 World Wetlands Day Symposium was a resounding success with over 240 participants from business, academia and government coming together to engage in discussions on this year's important theme."

World Wetlands Day events like the 2022 Symposium are a reminder that everyone can play a part in saving our wetland ecosystems, which are so critical for the health of our planet.



WETLAND FIELD TRIPS GO VIRTUAL

Bow Habitat Station (BHS) and Ducks Unlimited Canada (DUC) have a long-term partnership for in-person wetland field trips at the station, including the Wetland Discovery Day program for Grade 5 students. For the past two years, BHS and DUC have been delivering Wetland Discovery Day virtually – with the help of Alberta NAWMP funding.

BHS is one of Alberta Environment and Parks' top public environmental education facilities. Located on the Bow River in Calgary, the BHS site includes a fish hatchery, trout pond, interpretive trails, and a set of marshes constructed by DUC. This DUC wetland area is a terrific spot for Wetland Discovery Day's fascinating, handson experiences to inspire the next generation of wetland stewards.

"Our goal with the virtual program was to make sure that youth across Alberta continued to have the chance to get excited about wetlands even though they couldn't go out in person," explains Mariane Bolla, DUC's Head of National Education.

"Wetlands play such an important role in our watersheds and our water quality, they help us mitigate climate change, they help us with floods and drought, they are a home for biodiversity – and we are in a biodiversity crisis. Usually by Grade 5, kids know there are these concerns, but they don't really know what to do about them. Wetlands are a secret weapon to address all these concerns!" "THE WETLAND DISCOVERY DAY PROGRAM STRIVES TO CREATE A CONNECTION WITH WETLANDS FOR THE STUDENTS."

BHS and DUC developed the webinar together, each playing to their strengths. DUC supported the content development, making sure the information was correct and providing great images and videos. BHS staff put the information into a form designed to engage and excite Grade 5 students. BHS also connected with the schools and booked the sessions. And a skilled BHS educator hosted each hour-long, live, interactive webinar delivered via videoconferencing.

Like the in-person program, the webinar's content aligned with the Grade 5 Alberta science curriculum on wetland ecosystems. "We tried our best to translate the in-person activities into the webinar format," notes Erin Ritchie, BHS's Outreach, Partnership and Volunteer Coordinator.

"We included the different types of wetlands in Alberta and their ecosystem benefits not only for wildlife but for people as well. Then we went into the different types of wildlife that utilize wetlands," she explains.

"The in-person program includes marsh-dipping and identifying some of the bugs that we catch. So, in the virtual program, we showed enlarged photos of common aquatic invertebrates, and we worked through a dichotomous key with the kids to identify these invertebrates. And then we talked about why wetlands need protection and conservation, and about wetland stewardship actions they can do."

Bolla notes that the virtual program reached 100 classes and a total of 2,464 students. The webinars took place in: Brooks, Calgary, Chestermere, Cochrane, Drumheller, Edmonton, Fort McMurray, Medicine Hat, Red Deer, Sexsmith, and Strathmore. Like the in-person program, the webinars were free.

The webinars have been a valuable tool since 2020. "At Bow Habitat Station, we have our goals of fostering an appreciation for Alberta's land, air, water and biodiversity. Being able to continue that through this program is a huge achievement," says Ritchie.

Furthermore, the virtual format allowed the program's wetland stewardship message to reach schools across Alberta, whereas the in-person school groups came mainly from the Calgary region.

"The Wetland Discovery Day program strives to create a connection with wetlands for the students," notes Ritchie. "Establishing this connection creates a passion to become a wetland steward, not only with their actions but with sharing their knowledge with their friends, family and neighbours."

COMMITTEE REPORTS, 2021-22

BOARD OF DIRECTORS

Members are director-level executives from each Alberta NAWMP Partner agency. They are responsible for: defining Alberta NAWMP's vision, mission, goals, and strategies; directing medium-term implementation plans; approving annual work plans and budgets; and ensuring accountability for work plans and budgets. They also facilitate information exchange and engagement opportunities between their own agency and Alberta NAWMP.

The Board of Directors held quarterly meetings (web-based) in the fiscal year 2021-22 (FY22), providing guidance to the Management Committee and Policy and Communications subcommittees. The FY22 Work Plan and Budget was successfully implemented and the final report completed. The Board also developed FY23 Work Plan projections. The Board provided support to various grant funding initiatives through the Partnership and the Prairie Habitat Joint Venture (PHJV). It also continued to support development of the new PHJV Implementation Plan (IP). Board members participated and engaged with the PHJV Advisory Board and various subcommittees.

MANAGEMENT COMMITTEE

Members are senior managers from each Partner agency who facilitate integration of operational opportunities between their own agency and Alberta NAWMP. This Committee shares responsibility with the Alberta NAWMP Coordinator for projectbased decision-making and expenditures established in annual work plans and medium-term implementation plans.

The Management Committee held monthly meetings (web-based) as well as topic-specific meetings. It met jointly with the Board in December 2021 and March 2022. The Committee approved funding for the second year of research on the value of wetlands in livestock production landscapes. Committee members continued discussions on the role of human dimensions within the Partnership and participated on the PHJV's Policy and Human Dimensions Committees. The Committee provided support to the Policy and Communications subcommittees. As part of the PHJV IP development, all-birds conservation modeling was used to project habitat objectives, highlighting the importance of grassland conservation. The FY22 Work Plan and Budget was successfully implemented.

COMMUNICATIONS COMMITTEE

The Communications Committee leads information sharing, event hosting and promotion among the Partner agencies and beyond. Members are typically communication experts from each Partner agency.

The Communications Committee met monthly (webbased), including project-specific meetings. It hosted a series of webinars including such topics as: native grassland conservation, and all-birds conservation modelling and habitat objective setting. The Committee continued to implement the Partnership's Communication Strategy including: revisions to www.abnawmp.ca; an assessment of the future of www.wetlandsalberta.ca; ongoing production of an eNewsletter; and stories highlighting Alberta NAWMPfunded research. Also, it supported wetland conservation promotional events such as World Wetlands Day and its affiliated Symposium. Additional projects included support to a virtually delivered wetland conservation program for Grade 5 students, the second year of a landowner engagement project for trumpeter swans, and development of sector-specific engagement and evaluation tools, including support for agriculture sector focus groups to help in finalizing the Landowner Guide to the Alberta Wetland Policy. A draft of an agriculture sector engagement strategy was also initiated. The Alberta NAWMP Annual Progress Review for 2020-2021 was completed.

POLICY COMMITTEE

The Policy Committee members monitor relevant policy, planning and program developments in their agencies and advise on opportunities for Alberta NAWMP support. Members are usually senior policy specialists within the Partner agencies.

The Policy Committee met monthly (web-based), including specific project meetings by working group members. New key projects included a jurisdictional review of wetland performance metrics in selected states and provinces in North America and a scan of wetland ecosystem services produced on agricultural lands that benefit agricultural operations. As well, the Committee continued support to a carbon credit pilot project to avoid conversion of grasslands to other land uses, and continued its review of legislation, regulations, and policies related to grassland conservation in Alberta. It also supported development of two videos to showcase Ducks Unlimited Canada's Alberta Wetland Classification System Field Guide. The Committee identified priority issues to address in the near future such as understanding the value of working landscapes, increased risk of conversion of native grasslands to other land uses, and continued wetland loss. Support was provided to the Communications Committee to help finalize the Landowner Guide.

CONTRIBUTIONS TO NAWMP IN ALBERTA, 2021-22 AND 1986-2022

AGENCY TYPE	AGENCY	2021 - 2022 TOTAL	1986 - 2022ª CUM. TOTAL
CANADIAN CORPORATIONS		\$364,484	\$24,688,064
CANADIAN EDUCATION INSTITUTIONS		\$320	\$475,281
	Agriculture and Agri-Food Canada		\$38,532,523
	Canadian federal - unspecified		\$484
	Environment and Climate Change Canada*	\$7,288	\$7,288
	Environment and Climate Change Canada - Canada Nature Fund	\$943,728	\$3,748,185
	Environment and Climate Change Canada - Canadian Wildlife Service	\$291,460	\$42,601,229
	Environment and Climate Change Canada - EcoAction		\$85,571
	Environment and Climate Change Canada - Habitat Stewardship Program		\$3,655,828
	Environment and Climate Change Canada - Natural Areas Conservation Program		\$28,599,754
CANADIAN FEDERAL GOVERNMENT	Environment and Climate Change Canada - Natural Heritage Conservation Program	\$799,346	\$818,038
	Environment and Climate Change Canada – Nature Smart Climate Solutions*	\$751,606	\$751,606
	Fisheries and Oceans Canada		\$3,940
	Human Resources and Skills Development Canada		\$18,761
	Millennium Bureau of Canada		\$1,120,100
	Natural Resources Canada*	\$40.000	\$40,000
	Natural Sciences and Engineering Research Council of Canada		\$194,736
	Parks Canada		\$54,660
	Public Works and Government Services Canada		\$500
		\$2,833,428	\$120,233,203
	Agriculture and Food Council of Alberta	\$2,033,420	\$120,235,205
	Alberta Beef Producers		\$ 954,531
	Alberta Conservation Association	\$1,290	\$ 934,331
	Alberta Conservation Tillage Society	\$1,290	
	Alberta Ecotrust Foundation		\$125
	Alberta Environmental Farm Plan Company		\$22,542 \$240
	Alberta Fish and Game Association		\$1,506,348
	Alberta Native Plant Council		\$1,506,546
	Alberta Research Council		
	Alberta Research Council	¢1 500 544	\$5,000
	Antelope Creek Habitat Development	\$1,560,544	\$6,312,458
	Canada Trust Friends of the Environment Foundation		\$5,000
	Canadian Circumpolar Institute		\$5,500
	Canadian Nature Federation		\$3,500
	Canadian non-government organizations - unspecified		\$1,800
	Climate Change Central		\$180,264
	с. С		\$5,000
	Cropmasters Ducks Unlimited Canada		\$46,300
		\$1,694	\$3,377,366
	Eastern Irrigation District		\$75,085
CANADIAN NOT FOR PROFIT	Edmonton Community Foundation	\$43,473	\$72,075
	Edmonton Springer Spaniel Club		\$200
	George Cedric Metcalf Foundation		\$50,000
	Imperial Oil Charitable Foundation		\$5,818
	Institute for Wetland and Waterfowl Research		\$5,500
	Izaak Walton Killam Memorial Scholarship		\$2,000
	James L. Baillie Memorial Fund		\$2,000
	Lakeland Industry & Community Association		\$14,051
	Land Stewardship Centre of Canada		\$18,000
	Manitoba Habitat Heritage Corporation		\$45,317
	Nature Alberta		\$15,000
	Nature Canada		\$1,128,000
	Nature Conservancy of Canada	\$284,802	\$11,221,317
	North Saskatchewan Watershed Alliance		\$234,023
	Peace Parkland Naturalists		\$600
	Pheasants Forever		\$17,400
	Project Second Life Society		\$6,000
	Richard H. G. Bonnycastle Graduate Fellowship		\$15,000
	Richardson Foundation Inc.		\$374,788
	Rocky Mountain Elk Foundation – Canada		\$4,500
	Samuel Hanen Society for Resource Conservation		\$350

AGENCY TYPE	AGENCY	2021 - 2022 TOTAL	1986 - 2022 CUM. TOTA
	Shell Conservation Internship Program		\$7,29
	Shell Environmental Fund		\$25,12
	Soil Conservation Council of Canada		\$3,41
	Southern Alberta Land Trust Society		\$613,11
	Sustainable Forest Management Network		\$20,00
	The Calgary Foundation	\$4,881	\$47,07
	The Flanagan Foundation		\$29,04
CANADIAN NOT FOR PROFIT	The J.W. McConnell Family Foundation		\$6,99
	The Kahanoff Foundation		\$70
	United Farmers of Alberta		\$18,4
	Western Irrigation District		\$673,43
	Weston Family Foundation	\$250,000	\$251,5
	Wildlife Habitat Canada	\$67,182	\$4,246,08
	World Wildlife Fund Canada	\$01,10 <u>2</u>	\$36,0
	wond whune Fund Canada	\$2,213,866	\$36,321,5
	Aminukum Financial Comises Commentian	\$2,213,000	
	Agriculture Financial Services Corporation		\$446,5
	Alberta Agriculture and Forestry		\$10,570,7
	Alberta Culture and Community Spirit		\$8,0
ANADIAN PROVINCIAL &	Alberta Energy and Utilities Board		\$8,3
ERRITORIAL GOVERNMENTS	Alberta Environment and Parks	\$308,671	\$38,212,2
	Alberta Transportation		\$9,24
	Alberta Treasury Board and Finance	\$60,277	\$753,9
	Saskatchewan Water Security Agency		\$10,0
		\$368,948	\$50,019,02
	Big Hay Lake Drainage District		-\$34,6
	Bonnyville (Municipality of)		\$22,6
	Calgary (City of)		\$269,6
	Camrose County	Î	\$14,9
	Carstairs (Town of)		\$96,0
	Edmonton (City of)		\$211,0
	Flagstaff County		\$41,3
	Grande Prairie (City of)		\$7,8
	Grande Prairie County		\$2,0
	Greenview (Municipal District of)		\$6,9
	Lakeland (County of)		\$2,8
	Lamont County		\$30,4
	Manawan Drainage District		\$34,7
ANADIAN REGIONAL &	Medicine Hat (City of)		\$8,0
OCAL GOVERNMENTS	Minburn County		\$78,0
	Newell County		\$28,7
	Ponoka County		\$2,3
	Red Deer County		\$1,8
	Rocky View County		\$721,7
	Special Areas Board		\$3
	St. Albert (City of)		\$17,8
	St. Paul County		\$19,2
	Stettler County		\$2,7
	Strathcona County		\$87,6
	Strathmore (Town of)		\$198,6
	Sturgeon County		\$68,0
	Sylvan Lake (Town of)		\$30,0
	Wheatland County		\$3,2
		\$0	\$1,974,1
CANADIAN OTHER	Canadian – unspecified	\$4,378,797	\$56,309,1
JNITED STATES - ALL SOURCES	U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. state governments, Ducks Unlimited Inc., Anonymous Foundation, other	\$7,363,847	\$313,813,5
INTERNATIONAL			
	Conservation International Bahamas		\$59,7

* New contributor in 2021-22

ACTIVITY EXPENDITURES AND HABITAT ACCOMPLISHMENTS, 2021-22 AND 1986-2022

AGENCY	ΑCTIVITY	EXPENDITURES 2021-22	HABITAT ACRES 2021-22	NET HABITAT ACRES 1986-2022
ALBERTA AGRICULTURE AND FORESTRY (includes Agriculture and Agri-Food Canada, a former Alberta NAWMP Partner)	Securement			425,195
ALBERTA ENVIRONMENT AND PARKS	Securement			10,507
	Communication and education	\$12,218		
DELTA WATERFOWL FOUNDATION	Management (habitat assets)			1,852
	DWF TOTAL EXPENDITURES	\$12,218		
	Communication and education	\$130,952		
	Compensatory mitigation	\$4,096,148	1,686	4,169
	Conservation planning	\$1,789,783		
	Habitat Joint Venture science	\$379,467		
DUCKS UNLIMITED CANADA	Habitat restoration	\$1,661,353	41,788	1,203,347
	Habitat retention (≥10 years through permanent)	\$3,581,301	8,316	2,399,916
	Habitat retention (<10 years)	\$630,989	-21,986	226,082
	Land and water policy support	\$6,458		-175,320*
	Management (habitat assets)	\$3,804,650	202	2,561,314
	DUC TOTAL EXPENDITURES	\$16,081,101		
ENVIRONMENT AND CLIMATE CHANGE	Conservation planning	\$3,000		
CANADA - CANADIAN WILDLIFE SERVICE	Habitat Joint Venture science	\$113,000		
	ECCC TOTAL EXPENDITURES	\$116,000		
	Conservation planning	\$203,455		
NATURE CONSERVANCY OF CANADA	Habitat restoration	\$44,297		73,017
NATURE CONSERVANCE OF CANADA	Habitat retention (≥ 10 years through permanent)	\$11,400,516	4,033	360,004
	Management (habitat assets)	\$657,896	4,033	362,116
	NCC TOTAL EXPENDITURES	\$12,306,164		
OTHER AGENCIES	Communication and education; Conservation planning; Habitat Joint Venture science; Land and water policy support	\$59,236		4,141
	TOTAL EXPENDITURES 2021-22	\$28,574,719		
	TOTAL HABITAT (≥10 Years through Permanent),	RETENTION ACRES 2021-22 and 1986-2022	12,349	3,195,622

NOTES:

This table shows expenditures and habitat activities for the Alberta Prairie and Parkland eco-regions (Source: NAWMP National Tracking System). Variable timing of funds both contributed and received under NAWMP may result in differences between total funds received versus expended each fiscal year. Related habitat retention or restoration acres are similarly affected.

ACTIVITIES:

- Communication and education: communications specific to activities in approved proposals under the North American Wetlands Conservation Act (NAWCA). NOTE: all other communication activities are not eligible for NAWCA funds.
- Compensatory mitigation: involves creation, preservation, restoration and/or enhancement of wetlands or uplands as compensation for impacts on other wetlands or uplands.

- Conservation planning: biological, agrological and engineering planning and targeting activities that occur prior to actual program delivery.
- Habitat Joint Venture science: activities that evaluate the effects and inform future improvement of the NAWCA program throughout the Prairie Habitat Joint Venture.
- Habitat restoration: actions to increase carrying capacity for wetland-associated migratory birds and other wildlife.
- Habitat retention (≥10 years through permanent): protection of wetland and/or upland habitat through land title transfer or binding long-term conservation agreements with landowners.
- Habitat retention (<10 years): activities that promote or directly result in the sustainable use of land for the purpose of conserving wetland-dependent birds and their habitats.

- Land and water policy support: activities that identify or support development of policies benefiting wetlands or associated uplands. NOTE: these activities are not eligible for NAWCA funds.
- Management (habitat assets): actions to maintain carrying capacity for wetland-associated migratory birds and other wildlife on habitat retained for ≥ 10 years through permanent.

HABITAT ACRES:

- Habitat Acres, 2021-22: habitat acres retained, restored or managed between April 1, 2021 and March 31, 2022. NOTE: total acres are not cumulative.
- Net Habitat Acres, 1986-2022: cumulative total of habitat acres since 1986, less expired agreements.

A HEARTFELT THANKS TO OUR COOPERATORS

The Alberta NAWMP Partnership sincerely thanks all the individuals, companies, governments, conservation organizations, charitable foundations, academic institutions, and others who have contributed funds, conducted research, and collaborated with our Partners, to successfully deliver NAWMP programming across Alberta. As a key partner to the Prairie Habitat Joint Venture, our motto is Advancing Conservation Together. As a cooperator, you have played a vital part in our progress toward achieving our vision of healthy prairie, parkland and boreal landscapes that support sustainable bird populations and provide ecological and economic benefits to society.

A COMPLETE LIST OF OUR COOPERATORS FROM 1986 TO 2022 IS AVAILABLE AT

ABNAWMP.CA

PHOTO CREDITS

BHS	Bow Habitat Station
	Christian Artuso/Environment and Climate Change Canada
DC	Darwin Chambers/Ducks Unlimited Canada
DUC	Ducks Unlimited Canada



North American Wetlands Conservation Act





Environment and Climate Change Canada Environnement et Changement climatique Canada



Conserving Canada's **Wetlands**





For more information about Alberta NAWMP Partner activities, contact:

Chantelle Abma Ducks Unlimited Canada (Boreal) c_abma@ducks.ca

Joy Aguilar Environment and Climate Change Canada Joy.Aguilar@ec.gc.ca

Mary McIntyre Ducks Unlimited Canada (Prairie/Parkland) m_mcintyre@ducks.ca

Nathalie S. Olson Alberta Environment and Protected Areas Nathalie.S.Olson@gov.ab.ca

Melissa Orr-Langner Alberta Agriculture and Irrigation melissa.orr-langner@gov.ab.ca For more information about the Alberta NAWMP Partnership, contact:

Greg Hale Alberta NAWMP Coordinator g_hale@ducks.ca

Or visit abnawmp.ca