

2017-2018 Progress Review

APRIL 2017 TO MARCH 2018



North American Waterfowl Management Plan







CONTENTS

Preface: The Human Dimension in Wetland Conservation	1
NAWMP in Alberta	2
Who is Alberta NAWMP?	3
Preserving a Gem in a Parkland Conservation Setting	4
Partners in Boreal Forest Protection	5
The Wetland Education Network: Forward, Together	6
Evaluating Alberta NAWMP's Role in the Vermilion Plan	7
Duck Predation in the Changing Boreal Landscape	8
Committee Reports, 2017-18	9
Contributions to NAWMP in Alberta, 2017-18 and 1986-2018	10
Activity Expenditures and Habitat Accomplishments, 2017-18 and 1986-2018	12
Cooperators	13

Citation: Alberta NAWMP Partnership. 2018. Alberta NAWMP Partnership 2017-2018 Progress Review: April 2017 to March 2018. Ducks Unlimited Canada, Edmonton, AB. Alberta NAWMP-068.

Copyright © 2018 Alberta NAWMP Partnership

Printed in Canada

Cover photo: Ducks Unlimited Canada

Photo credit abbreviations are defined on the inside of the back cover.

PREFACE: THE HUMAN DIMENSION IN WETLAND CONSERVATION

People and their experiences are shaping the evolution of waterfowl populations and habitats here in Alberta and across the continent. In recognition of that, the most recent update to the North American Waterfowl Management Plan (NAWMP) increases the Plan's emphasis on growing the number of waterfowl hunters, other conservationists and citizens who actively support waterfowl and wetland conservation.

Personal experiences often drive people's interest in wetlands and waterfowl. For me, a key moment was many years ago during my short stay in Carstairs, Alberta. It was a beautiful, growing community where we moved to escape city life. A local wetland was in jeopardy of being lost through the town's expansion. With heavy equipment preparing to landscape this area, town residents and concerned Albertans requested a stop-work order that prevented this avoidable loss. Although my profession was already focused on waterfowl and wetland conservation, this community action reinforced for me the commitment we all share to maintain our natural spaces and preserve these important habitats. On a recent trip back to Carstairs, I purposely drove by this wetland. I was proud to see the wetland was still functioning, with the growing community still maintaining the appropriate setbacks from the wetland.

Connecting people with the importance of wetland and waterfowl conservation is a key part of what the Alberta NAWMP Partnership does. Through our annual forums, communications and projects, we seek to discover how our interests intersect with the interests of other stakeholders and to move forward together to achieve shared goals. This *Progress Review* gives some great examples of our approach.

For instance, Evaluating Alberta NAWMP's Role in the Vermilion Plan describes findings from an objective evaluation. It showed that Alberta NAWMP's collaborative, respectful approach, and its focus on group capacity building made a significant contribution to a multi-agency watershed planning effort and ensured that wetlands were an essential part of the plan.

In *The Wetland Education Network:* Forward, Together, we look at a network that is bringing together people from many sectors to advance wetland education. Alberta NAWMP is acting as a facilitator, funder and capacity builder to help get the network off to a good start.

Preserving a Gem in a Parkland Conservation Setting highlights the power of personal experiences. A landowner's passion for a beautiful, natural quarter section and her strong working relationship with Ducks Unlimited Canada (DUC), an Alberta NAWMP partner, inspired her to protect this habitat forever through a DUC conservation easement.

Partners in Boreal Forest Protection outlines how governments, First Nations, industries and environmental groups worked together to add 3.36 million acres to Alberta's boreal parks. The Nature Conservancy of Canada and Alberta Environment and Parks, which are both Alberta NAWMP partners, were among the many agencies involved in this momentous advance, which ensures protection of countless wetlands, along with many other benefits.

With *Duck Predation in the Changing Boreal Landscape*, we profile research by DUC and the University of Waterloo that is investigating how industrial development affects ducks in Alberta's boreal region. This study will help strengthen the biological foundation of boreal conservation programs.



While the faces around the table change as we work on different initiatives, one aspect that doesn't change is how working together takes us farther than working alone. I thank all the individuals and agencies that helped us make this past year a success. On behalf of Alberta NAWMP, I am pleased to present the *Alberta NAWMP Partnership 2017-2018*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. This region contains some of the most productive areas for waterfowl in the world and is crucial to the maintenance and recovery of mid-continent waterfowl populations.

Since its inception in 1986, the PHJV has developed a series of science-based Habitat Implementation Plans to guide its activities.

Its 2013-2020 Habitat Implementation Plan is aligned with NAWMP's 2012 Revision, the most recent update of the international plan. The 2012 Revision continues NAWMP's focus on conserving waterfowl populations and their key habitats but adds a heightened emphasis on engagement with hunters, other conservationists and the general public.

The 2013-2020 plan also widens the PHJV's scope to formally include the Western Boreal Forest Region in addition to its longstanding interest in the Prairie and Parkland regions. And this plan increases the PHJV's attention on other types of birds, while maintaining its enduring commitment to waterfowl conservation.

The PHJV includes provincial NAWMP partnerships in Alberta, Saskatchewan and Manitoba. The Alberta component of the PHJV's 2013-2020 plan provides the framework and springboard for Alberta NAWMP's current activities.

Alberta NAWMP is a partnership 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 committees.

The members of the Board and the committees are drawn from the five partner agencies.

Alberta NAWMP coordinates joint projects, communications, planning and policy support, and it 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.

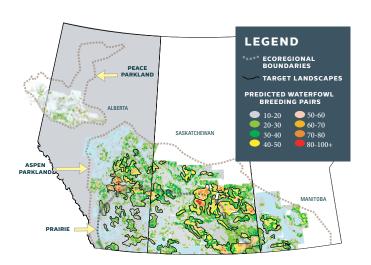
ALBERTA NAWMP (PHJV) VISION

Healthy prairie, parkland and boreal landscapes that support sustainable bird populations and provide ecological and economic benefits to society.

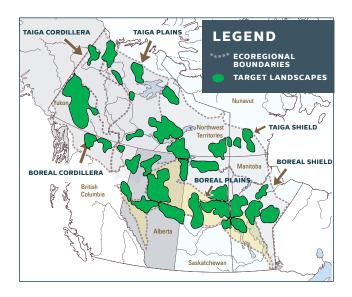
ALBERTA NAWMP (PHJV) MISSION

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



WESTERN BOREAL FOREST TARGET LANDSCAPES



WHO IS ALBERTA NAWMP?

Alberta NAWMP's success comes from the synergy of working together. It is a partnership of one federal and two provincial government departments and two non-government agencies that all have a responsibility for Alberta's wetlands as part of their mandates. The five organizations continually seek opportunities to work with each other and with regional and municipal agencies and other stakeholders. These collaborative networks enhance existing wetland stewardship efforts, launch innovative initiatives that otherwise might not happen, and build interest in and capacity for wetland conservation.

Together, the Alberta NAWMP partners and their collaborators are making exciting advances 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 and Forestry includes the Department of Agriculture and Forestry and a number of agencies, boards and commissions. Among the ministry's core business activities are: providing the framework and services necessary for the protection, conservation and sustainable management of forests; and enabling environmentally responsible and economically competitive forestry, agriculture and agri-food industries in Alberta and its global marketplaces.

Environment and Climate Change Canada strives to preserve and enhance the quality of the natural environment, including water, air, soil, flora and fauna, conserve Canada's renewable resources, conserve and protect Canada's water resources, and coordinate environmental policies and programs for the federal government.

PRIVATE, NON-PROFIT

Ducks Unlimited Canada (DUC) is a registered charity that has 80 years of experience in wetland conservation and restoration. DUC partners with government, industry, non-profit organizations and landowners 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 long-term 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, 2017-18

BOARD OF DIRECTORS

Ron Bennett, Environment and Climate Change Canada
Bob Demulder, Nature Conservancy of Canada
Len Kryzanowski, Alberta Agriculture and Forestry
Ron Maher, Ducks Unlimited Canada
Travis Ripley (Chair), Alberta Environment and Parks

MANAGEMENT COMMITTEE

Ron Bennett, Environment and Climate Change Canada
Roger Bryan, Alberta Agriculture and Forestry
Jason Caswell, Alberta Environment and Parks
Alain Richard, Ducks Unlimited Canada (Boreal)
Tracy Scott, Ducks Unlimited Canada (Prairies)
Terra Simieritsch (Chair), Alberta NAWMP Coordinator

POLICY COMMITTEE

Ron Bennett, Environment and Climate Change Canada
Ken Calbick (Incoming Chair), Alberta Environment
and Parks

Gerry Haekel (Outgoing Chair), Alberta Environment and Parks

Fred Hays, Alberta Beef Producers

Thorsten Hebben, Alberta Environment and Parks
Mathieu Lebel, Alberta Environment and Parks
Glenn Mack, Alberta Environment and Parks
Anish Neupane, Alberta Environment and Parks
Karen Raven, Alberta Agriculture and Forestry
Alain Richard, Ducks Unlimited Canada (Boreal)
Tracy Scott, Ducks Unlimited Canada (Prairies)
Danica Staudt, Alberta Environment and Parks
Barry White, Alberta Agriculture and Forestry

COMMUNICATIONS COMMITTEE

Paul Jungnitsch, Alberta Agriculture and Forestry
Cathy MacKenzie, Ducks Unlimited Canada (Prairies)
Raina Mithrush, Ducks Unlimited Canada (Boreal)
Dave Mussell (Chair), Alberta Environment and Parks
Carys Richards, Nature Conservancy of Canada
Nena Snyder, Environment and Climate Change Canada

COORDINATOR

Terra Simieritsch

2017-2018 PROGRESS REVIEW

PRESERVING A GEM IN A PARKLAND CONSERVATION SETTING

"A piece of paradise." That's how landowner Gloria Beck describes her beautiful, natural quarter section southeast of Red Deer. This past year, Beck and Ducks Unlimited Canada (DUC) set up a conservation easement to protect this prime habitat forever.

Beck's property is a land of rolling hills and wetlands in Alberta's parkland landscape, with wildflowers and prairie wool swaying in the summer breezes. Its diverse wildlife ranges from moose, deer and beavers, to great blue herons, hawks, great horned owls, countless songbirds and abundant ducks.

"My dad bought this quarter section when he was only 16. At the time, there were probably only two other men in the area who thought they had the money to buy this land. My dad earned money trapping, and he was able to purchase it. As he would tell the story, 'They didn't know some snotty-nosed kid would buy it out from under them!'" laughs Beck.

"That's the story we grew up with. He was very proud of this quarter, and through the years, he always talked about keeping it in its natural state," she says.

"Jumping forward a lot of years, I asked my dad if I could purchase this quarter from him. I loved country living, and I was always concerned that if he sold the land to somebody else, they might want to clear it. I wanted to make sure that it kept its natural habitat."

Beck and DUC first started working together on this quarter about 30 years ago. Then in 1998, Beck and Cecil Walton, who was her neighbour at the time, along with DUC and the County of Red Deer formed

a partnership to install a couple of dams for retaining water on Beck's and Walton's properties. Beck says, "We all had a part to play in making this land the natural wetland area it is today."

Back then, DUC had asked Beck about entering a 30-year agreement, but 30 years seemed to her like a very long way into the future. So she committed to a shorter agreement.

However, after three decades of great working relationships with DUC people, including Bob Thomson, the previous DUC representative in the area, and more recently Darwin Chambers, Beck was ready for a permanent agreement.

Her 'No Break, No Drain' DUC conservation easement protects in perpetuity the parcel's 128 acres of upland habitat and 20 acres of wetland habitat.

"This parcel has long been a priority for DUC. With its intact wetlands and parkland vegetation, it is a gem," says Chambers, who is DUC's Alberta head of conservation programs. "And nowadays, there are fewer and fewer of those gems on the landscape."

This easement will make a valuable contribution to Alberta NAWMP's conservation goals for the Alberta Parkland Region. Chambers says, "Gloria's quarter section provides great waterfowl habitat, with an estimated 30 to 40 duck breeding pairs per square mile. Plus, the parcel is a part of a larger conservation footprint in the Pine Lake Landscape, a NAWMP priority landscape. We have numerous other nearby conservation projects, providing habitat connectivity for wildlife."

In DUC conservation easements, the landowner retains the management of the land. "Gloria is a steward of the land. She manages the property with a conservation mindset so it is not overgrazed and has an abundance of birds and other wildlife," he notes. "She was a natural fit for when we had some funding for conservation easements. And she has always been interested in preserving the habitat on her parcel for generations."

Beck says, "I want to keep this land the way Dad had dreamed of and then I dreamed of. You never know down the road, if someone else might not care quite enough to protect this habitat. If we don't take care of it, who will?"



"I WANT TO KEEP THIS LAND THE WAY DAD HAD DREAMED OF AND THEN I DREAMED OF," SAYS BECK.



PARTNERS IN BOREAL FOREST PROTECTION

In spring 2018, the protection of Alberta's boreal habitat took a momentous step forward with the establishment of 3.36 million acres of new protected lands. With this addition to existing federal and provincial parks, Alberta now has the largest contiguous protected boreal forest area in the world. Among its many benefits, this vast protected area ensures protection of countless boreal wetlands that provide habitat for migratory waterfowl and other wildlife.

Partner agencies in Alberta NAWMP, especially the Nature Conservancy of Canada (NCC) and Alberta Environment and Parks (AEP), were part of the major collaborative efforts involved in creating these new protected lands, which consist of five new or expanded wildland provincial parks (WPPs).

NCC was the facilitator in a partnership that resulted in one of the new parks. "The partnership was between the Tallcree Tribal Government, NCC, the governments of Alberta and Canada, and Syncrude Canada," explains Carys Richards, communication coordinator with NCC.

"NCC purchased the A9 timber quota in the area that is now called the Birch River Wildland Provincial Park. We purchased the quota from the Tallcree using funds mostly from Syncrude. We transferred the quota to the Government of Alberta, and they cancelled the quota and turned the area into a protected space." Some other funds for the project were provided by the Natural Areas Conservation Program, a unique partnership between NCC and Environment and Climate Change Canada, another Alberta NAWMP partner.

"NCC is proud to have been part of this historic expansion of Alberta's boreal protected areas," she says. "We hope the success here inspires people across Canada and the world to see what you can achieve when organizations partner together with the goal of conservation."

The other four parks include the new Dillon River WPP and expansions of the Kazan, Richardson and Birch Mountains WPPs. With the five parks plus Wood Buffalo National Park and the other existing parks, Alberta now has 16.5 million acres of boreal protected areas.

The new protected areas had their beginnings from 2010 to 2012 in the work of an advisory council with representatives from municipalities, industry, First Nations, and environmental non-governmental organizations. This council provided input into the development of the Lower Athabasca Regional Plan, including recommendations for expanding the region's protected lands.

After the regional plan was completed in 2012, AEP worked on putting the pieces in place so the recommended parks could be created. "Such a big change took a lot of years and the support of the First Nation communities, various industries and the environmental non-governmental organizations to make it all work," explains Travis Ripley, executive director of AEP's Fish and Wildlife Policy Branch and chair of the Alberta NAWMP Board.

"We needed the strength of every stakeholder to make this effort the success it was. ...It highlights what can be accomplished at a very large scale with a collaborative attitude."

The new boreal protected areas are exciting for Alberta NAWMP, which has recently been broadening its scope of interest beyond Alberta's Prairie and Parkland regions to also encompass Alberta's Boreal Forest Region. Ripley says, "The bordering of these new wildland provincial parks around the Peace-Athabasca Delta is a great addition to support the numerous species of waterfowl and waterbirds which rest, feed and breed in the area, one of the most important places in North America for waterbirds. In addition, the WPP designation allows for the continuing heritage of hunting and fishing in these parks."

MAJOR COLLABORATIVE EFFORTS HAVE ADDED 3.36 MILLION ACRES TO ALBERTA'S PROTECTED BOREAL LANDS.

"The boreal protected areas are hugely beneficial to the Alberta NAWMP Partnership because of the large number of wetlands they include," says Richards. "Billions of birds need Canada's Boreal Forest as a critical breeding ground, including waterfowl, shorebirds, songbirds and raptors." As well, she notes that the Canada's Boreal Forest Region performs other ecosystem services such as being a significant source of fresh water and a major carbon sink.

By coupling a multi-stakeholder approach with a strong understanding of the immense value of boreal landscapes, Alberta has set a powerful example for the way forward on boreal conservation.



2017-2018 PROGRESS REVIEW

THE WETLAND EDUCATION NETWORK: FORWARD, TOGETHER

If you're keen on making your wetland education efforts more effective and efficient – and getting the boost in inspiration and energy that comes from working together – then joining the Wetland Education Network (WEN) could be for you.

"Education and outreach is a valuable tool to increase knowledge around the benefits wetlands provide and to engage stakeholders in wetland stewardship practices," says Christina Pickles, the WEN coordinator. "There are many programs in Alberta providing wetland education for different audiences from grade 5 students to municipal leaders to landowners. The Wetland Education Network offers a real opportunity for collaboration between different groups, to pool ideas, skills and funds to create educational resources and tools, and to disseminate common messages to the different audiences."

Alberta NAWMP is acting as a facilitator, funder and capacity builder to help get the WEN off to a good start. The idea for the network emerged at an Alberta NAWMP workshop in 2015 during discussions among people involved in wetland stewardship. Then, Alberta NAWMP sponsored the activities of a multi-agency working group to flesh out the idea. The working group's proposal for setting up the network was accepted at an Alberta NAWMP wetland forum in 2016. After a successful pilot, the network was launched in 2017, and Pickles was hired as the coordinator.

Pickles explains that the WEN has three components. One is the Action Groups representing four sectors: industry; agriculture; municipalities; and education/public. Each group discusses wetland education issues in its sector, and works on tools and delivery mechanisms to reach their target audiences more effectively. The Action Groups are already underway.

The second component is the network. Pickles says, "Beyond the Action Groups, many other organizations and individuals are involved in wetland education in Alberta. To engage this wider network, the WEN hosts an annual workshop in February/March and releases an occasional e-newsletter to share resources and other opportunities." The March 2018 workshop had more than 50 participants. They learned about best practices for advancing wetland education in Alberta using a network approach and had the opportunity to meet others interested in advancing wetland education.

The third component is an online hub, which is being developed as a place to learn about the WEN and to find wetland education and outreach resources.

Taking part in the WEN can be very rewarding. Jocelyn Thrasher-Haug, manager of environmental planning with Strathcona County, is a member of the Municipal Action Group. She says, "My experiences with the Wetland Education Network have always been positive, whether it's the workshops where ideas and programs are formally exchanged and a wider audience is involved, or the [Action Group] meetings which are often support-group sessions as we share progress and setbacks."

Another member of the Municipal Action Group is Marissa Koop, an environmental planner with B&A Planning Group. "The Wetland Education Network has allowed me to meet some very interesting people from a network of professionals outside of my own," she says. "We each have unique experiences that allow us to learn from each other, leading to greater understanding of issues as a whole."

"WITH THE WEN, YOU'RE CONNECTING WITH OTHERS SO WE CAN ADVANCE WETLAND EDUCATION TOGETHER," SAYS PICKLES.

For Koop, the value of the WEN is in the people who are connected within it. "For example, I don't do a lot of work with watershed planning or watershed stewardship. But, through the network, I have met people who do. So, if I have a question, or if there is a project that we can potentially partner on, I now know who to call."

For Thrasher-Haug, the WEN's value comes from "learning from others, their successes and challenges, across diverse organizations, and leaning on others from diverse organizations. I often leave the meetings energized just in the knowledge that others are trying their best, but also energized by new ideas to integrate into my organization."

Pickles says, "With the WEN, you're not out there doing it on your own. You're connecting with others so we can advance wetland education together."



EVALUATING ALBERTA NAWMP'S ROLE IN THE VERMILION PLAN

Alberta NAWMP played a pivotal part in the Vermilion River Watershed Management Project (VRWMP), helping this pioneering sub-basin planning effort to get up and running, and in particular, ensuring that wetlands were an essential part of the plan. That's one of the findings from an evaluation of Alberta NAWMP's role in the VRWMP.

The Vermilion River watershed is one of 12 sub-basins in the North Saskatchewan River basin. In 2007, when the project started, the communities in the watershed were dealing with such challenges as flooding and drought in a landscape highly altered by wetland drainage and land clearing over the past century. The VRWMP brought together representatives from the North Saskatchewan Watershed Alliance (NSWA), federal, provincial and municipal governments, other nongovernment organizations, and Alberta NAWMP. Together they conducted an extensive planning and engagement process. The result was the 2012 release of the Vermilion River Watershed Management Plan, which is currently being implemented.

"Back in 2007, the Alberta NAWMP Board was interested in the idea of integrating wetlands into watershed planning to create new opportunities for wetland restoration and protection. They viewed sub-basins as the scale at which watershed objectives could become tangible, where implementation could be practical, and where local support and leadership could result. But it was a new idea. So the Board said, 'Yes, we should be involved, but we should evaluate our involvement,'" explains Michael Barr, who was the Alberta NAWMP coordinator at the time.

He says, "Coincidentally, the NSWA was interested in piloting the sub-basin planning process, but they didn't have the resources to do it. Alberta NAWMP funds enabled both the NSWA and Alberta NAWMP to explore this idea, allowing the NSWA to assign technical and watershed planning expertise needed to make the VRWMP a success." And Barr invested considerable effort as Alberta NAWMP's representative on the VRWMP's planning and executive committees.

In spring 2018, Alberta NAWMP asked Christopher Cameron with Objective Research and Evaluation Inc. to evaluate if, how and why Alberta NAWMP's investment in the VRWMP made a significant and positive impact. Several key stakeholders in the VRWMP participated in the interview-based evaluation.

The evaluation participants all agreed that supporting the VRWMP helped Alberta NAWMP achieve its wetland conservation goals. "My persistent highlighting of wetland effects on surface and ground water ensured that wetlands were central to our discussions and central to solutions in the plan," says Barr.

The participants also believed Alberta NAWMP's aims were aligned with the VRWMP's aims. Cameron notes, "This congruence enabled the VRWMP stakeholders to engage in high-quality discussions that facilitated the development of a strong watershed plan."

The participants described Alberta NAWMP's approach as collaborative, non-directive, and oriented toward group capacity building.

They all thought Alberta NAWMP made significant contributions to the VRWMP, especially through its funding support and Barr's involvement.

"All participants said the presence of the Alberta NAWMP coordinator was a tremendous value. His calm, collaborative manner and balanced approach was ideal for facilitating discussions since watershed planning can be contentious," explains Cameron.

He adds, "I think Alberta NAWMP's participation was a win-win for everybody. Alberta NAWMP, all the VRWMP stakeholders and the local community all benefitted."

Since 2012, the strength of the VRWMP plan has enabled the stakeholders to access over \$1.5 million in provincial and federal grants for wetland restoration and retention in the watershed.

Mara Erickson was hired by the NSWA to manage on-the-ground activities conducted under the grants. She says, "Wetland restoration and conservation is definitely an important part of what I do, particularly because we received grants specifically related to that. Another big part of what we do is working with the local community to increase their knowledge about the importance of wetlands and riparian areas."

The current Alberta NAWMP coordinator, Terra Simieritsch, says, "The evaluation shows how an alignment of goals among stakeholders and a respectful, forward-thinking, collaborative approach allowed wetlands to be integrated into a watershed planning process in a meaningful way."

2017-2018 PROGRESS REVIEW

DUCK PREDATION IN THE CHANGING BOREAL LANDSCAPE

An innovative research project aims to deepen our understanding of the relationship between industrial development and duck nest predation in Alberta's boreal region, helping to ensure that conservation activities in this region are effective. Along the way, the project is also revealing some cool new information about boreal duck predators.

8

"Only limited research has been done on boreal ducks. Given the fast pace of industrial development in the boreal region, the Prairie Habitat Joint Venture (PHJV) boreal conservation programs have largely been developed based on assumptions that represent a mix of expert opinion and data from other biomes," explains Dr. Stuart Slattery, a research scientist with Ducks Unlimited Canada (DUC) who is leading this project.

"One assumption is that duck nest survival decreases with increasing density of linear features such as roads, pipelines and seismic lines. We think this habitat fragmentation enables predators to have greater access to duck nesting habitat, reducing hen survival and nest success. We want to test this assumption."

And that's what this project is all about. It seeks to answer some key questions: How does nest site selection influence nest survival in the boreal? What predators are responsible for nest mortality? As linear disturbances increase, do predator communities shift to include more duck predators, and does nest survival decrease?

Slattery says, "Answering these questions will strengthen the biological foundation of the PHJV's boreal programs."

The project is a collaborative effort between DUC and the University of Waterloo. PhD student Matthew Dyson is carrying out the work under the guidance of associate professor Bradley Fedy and Slattery. The project started with a pilot field season in 2016, followed by two full field seasons in 2017 and 2018. Dyson will be analysing the field data, developing a model to simulate predator movements in different boreal landscapes, and writing up the results over the next year or so.

The study area is north-northwest of Slave Lake, Alberta, around the Utikuma Lake region. The fieldwork involves a novel combination of searching for natural nests, installing artificial nests, and using cameras.

"We have identified sampling areas ranging from low to high disturbance. We do nest searching around wetlands in those areas, identify the nests and keep track of their success throughout the summer," says Slattery.

"However, finding duck nests in the boreal forest is very hard and it's extremely difficult to get large sample sizes. So we are also using artificial nests to get a relative index of how nest success might change with the density of linear disturbances."

Cameras installed near natural and artificial nests are providing vivid evidence about which predators are actually eating duck nests. Cameras in travel locations, accompanied by a commercial scent lure and a hair snag to obtain DNA information, are gathering information to help in determining how the community of nest predators shifts as the level of industrial development increases.

"This project is very novel work. The amount of effort that has gone into nest searching here has never before been put forth in this part of the boreal forest," Slattery emphasizes.

"BASIC INFORMATION ABOUT WHO EATS DUCK NESTS IS COMPLETELY NEW FOR THIS AREA," SAYS SLATTERY.

"As well, basic information about who eats duck nests is completely new for this area — compared to the prairies, we are decades behind in terms of our understanding of waterfowl ecology in the boreal region. In the past, we've guessed about who is likely to eat boreal nests. Now, we've found that some of our guesses were not quite right. For instance, [the photos showed] ravens, bears and lynx ate ducks or their eggs. We thought some of those species would be preying on nests, but their importance was really surprising." Examples of other nest predators caught on camera include weasels, pine martens, squirrels and coyotes.

Funding for this project is from the Alberta Conservation Association - Biodiversity Grants, Alberta NAWMP, Ankney Award, DUC, DUC MBNA Fellowship, MITACS Canada, Ontario Graduate Scholarship - Queen Elizabeth II, University of Waterloo, Wildlife Habitat Canada, and the Waterfowl Research Foundation.



COMMITTEE REPORTS, 2017-18

BOARD OF DIRECTORS

Members are director-level executives from each 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 met in November 2017 and March 2018. At the November meeting, they had a presentation from Hugh Hunt with the Prairie Habitat Joint Venture (PHJV) on the linkages between Alberta NAWMP and the PHJV. They also reviewed progress on the Work Plan and Budget for FY18 (fiscal year 2017-18) and started planning for the Executive Breakfast Meeting to be held in early FY19. A call in February continued the Breakfast Meeting planning. The March meeting focused on amending the Alberta NAWMP Terms of Reference, review of the FY18 projects, and review and approval of the FY19 Work Plan and Budget.

Ron Maher (with Ducks Unlimited Canada (DUC)) formally joined the Board in fall 2017.

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 project-based decision-making and expenditures established in annual work plans and medium-term implementation plans.

The Management Committee met twice in 2017-18 and held one conference call. At the December meeting, the members received a report on projects and funding

allocations thus far and initiated a new process for allocating funding to science projects. During the January call, they reviewed and approved a more detailed plan on how to receive and decide on funding for science projects, and approved creation of a new website for Alberta NAWMP. At the March meeting, they reviewed FY18 projects and expenditures, received a presentation on the evaluation of Alberta NAWMP's role in a watershed plan (see Evaluating Alberta NAWMP's Role in the Vermilion Plan in this Progress Review), and reviewed and approved the FY19 Work Plan and Budget. The Committee also created new systems for better project management, including moving the annual forum to a fall timeslot.

COMMUNICATIONS COMMITTEE

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

The Communications Committee had four meetings and a video conference call during 2017-18. Most meetings centred on the Committee's largest project, the Wetland Education Network (WEN, see *The Wetland Education Network: Forward, Together*), including getting the network running after the pilot in 2016-17, hiring a coordinator, and discussing processes and Terms of Reference. The Committee members worked with the new coordinator to plan and conduct a WEN workshop on March 1, 2018. In its February meeting, the Committee reviewed its FY18 activities and planned for FY19.

Raina Mithrush (with DUC Boreal) joined the Communications Committee in fall 2017.

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 five times in FY18. At the June and September meetings, the members received presentations on key projects initiated in FY17, and they continued or initiated projects identified in the FY18 Work Plan and Budget. In November, they received a presentation from and networked with the PHJV's Hugh Hunt, and discussed a path forward for recognition of the role of wetlands in the carbon cycle. At the January meeting, the members received presentations on DUC Boreal wetland management projects and research, and a presentation about ongoing wetland policy research projects. At the March meeting, they reviewed their progress in FY18 and planned for FY19. FY18 projects included: continued support for the Alberta Wetland Rapid Evaluation Tool (desktop version), and the evaluation of Alberta NAWMP's role in the Vermilion plan.

Mathieu Lebel, Anish Neupane and Danica Staudt (all with Alberta Environment and Parks (AEP)), Alain Richard (with DUC Boreal), and Barry White (with Alberta Agriculture and Forestry) joined the Policy Committee in 2017-18. Ken Calbick (with AEP) formally became the Committee's chair in fall 2017.



CONTRIBUTIONS TO NAWMP IN ALBERTA, 2017-18 AND 1986-2018							
AGENCY TYPE	AGENCY	2017-18ª TOTAL	1986-2018 ^a CUM. TOTAL				
CANADIAN CORPORATIONS		\$163,082	\$20,591,82				
CANADIAN EDUCATION INSTITUTIONS			\$300,27				
	Agriculture and Agri-Food Canada		\$38,532,5				
	Canadian federal - unspecified		\$4				
	Environment and Climate Change Canada - Canadian Wildlife Service	\$1,006,262	\$40,120,7				
	Environment and Climate Change Canada - EcoAction	\$25,000	\$33,2				
	Environment and Climate Change Canada - Habitat Stewardship Program		\$3,655,8				
	Environment and Climate Change Canada - Natural Areas Conservation Program	\$15,357	\$28,545,0				
ANADIAN FEDERAL GOVERNMENT	Fisheries and Oceans Canada		\$3,0				
	Human Resources and Skills Development Canada		\$18,7				
	Millennium Bureau of Canada		\$1,120,1				
	Natural Sciences and Engineering Research Council of Canada		\$194,7				
	Parks Canada		\$54,0				
	Public Works and Government Services Canada		\$				
		\$1,046,619	\$112,279,5				
	Agriculture and Food Council of Alberta	ψ1,010,017	\$275,0				
	Alberta Beef Producers		\$954,				
	Alberta Conservation Association		\$4,322,				
	Alberta Conservation Tillage Society		\$ 5,322,				
	Alberta Ecotrust Foundation		\$22,				
	Alberta Environmental Farm Plan Company		\$22,				
	Alberta Fish and Game Association		\$1,506,				
	Alberta Native Plant Council		\$1,500,				
	Alberta Native Piant Council Alberta Research Council						
		¢205.000	\$5,				
	Alberta Sport, Recreation, Parks & Wildlife Foundation	\$385,000	\$517,				
	Antelope Creek Habitat Development		\$5,				
	Canada Trust Friends of the Environment Foundation		\$5,				
	Canadian Circumpolar Institute		\$3,				
	Canadian Nature Federation		\$1,				
	Canadian non-government organizations - unspecified		\$180,2				
	Climate Change Central		\$5,0				
	Cropmasters		\$46,				
	Ducks Unlimited Canada		\$3,375,				
	Eastern Irrigation District		\$75,				
	Edmonton Community Foundation		\$28,				
CANADIAN NOT FOR PROFIT	Edmonton Springer Spaniel Club		\$2				
	George Cedric Metcalf Foundation		\$50,				
	Imperial Oil Charitable Foundation		\$5,				
	Institute for Wetland and Waterfowl Research		\$5,				
	Izaak Walton Killam Memorial Scholarship		\$2,0				
	James L. Baillie Memorial Fund		\$2,0				
	Lakeland Industry & Community Association		\$14,0				
	Land Stewardship Centre of Canada		\$18,0				
	Nature Alberta		\$15,0				
	Nature Canada		\$1,128,0				
	Nature Conservancy of Canada	-\$385,255	\$11,663,				
	Peace Parkland Naturalists		\$6				
	Pheasants Forever*	\$17,400	\$17,				
	Project Second Life Society		\$6,				
	Richard H. G. Bonnycastle Graduate Fellowship		\$15,				
	Richardson Foundation Inc.		\$372,				
	Rocky Mountain Elk Foundation – Canada		\$4,				
	Samuel Hanen Society for Resource Conservation		\$.				
	Shell Conservation Internship Program		\$7,2				
	Shell Environmental Fund		\$25,				
	Soil Conservation Council of Canada	\$1,667	\$3,4				
	Southern Alberta Land Trust Society	\$1,00/	\$613,				

	l annous		1986-2018 ^a
AGENCY TYPE	AGENCY	2017-18° TOTAL	CUM. TOTAL
	Sustainable Forest Management Network		\$20,00
	The Calgary Foundation	\$6,000	\$9,94
	The Flanagan Foundation		\$29,04
	The J.W. McConnell Family Foundation		\$6,99
	The Kahanoff Foundation		\$70
CANADIAN NOT FOR PROFIT	The W. Garfield Weston Foundation		\$1,53
	United Farmers of Alberta		\$18,44
	Western Irrigation District		\$673,43
	Wildlife Habitat Canada	\$169,725	\$3,792,0
	World Wildlife Fund Canada		\$36,0
		\$194,537	\$29,887,5
	Agriculture Financial Services Corporation		\$446,52
	Alberta Agriculture and Forestry		\$10,570,7
	Alberta Culture and Community Spirit		\$8,0
	Alberta Energy and Utilities Board		\$8,3
CANADIAN PROVINCIAL &	Alberta Environment and Parks	\$4,315,395	\$34,780,0
ERRITORIAL GOVERNMENTS	Alberta Transportation		\$9,2
	Alberta Treasury	\$5,700	\$693,6
	Manitoba Habitat Heritage Corporation		\$45,3
	Saskatchewan Water Security Agency		\$10,0
		\$4,321,095	\$46,571,8
	Big Hay Lake Drainage District		-\$34,6
	Bonnyville (Municipality of)		\$22,6
	Calgary (City of)		\$269,6
	Camrose County		\$14,9
	Carstairs (Town of)		\$96,0
	Edmonton (City of)		\$166,5
	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
	Medicine Hat (City of)		\$8,0
CANADIAN REGIONAL &	Minburn County		\$78,0
LOCAL GOVERNMENTS	Newell County		\$28,7
	Ponoka County		\$2,3
	Red Deer County		\$1,8
	Rocky View County	\$2,045	\$347,6
	Special Areas Board	\$2,04)	\$347,0
	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
		\$2,045	\$1,555, 5
CANADIAN OTHER	Canadian – unspecified	\$2,438,426	\$37,499,4
JNITED STATES - ALL SOURCES	U.S. Fish and Wildlife Service, U.S. state governments, Ducks Unlimited Inc., Anonymous Foundation, other	\$9,290,822	\$284,266,80
NTERNATIONAL	Conservation International Bahamas		\$59,7
GRAND TOTAL		\$17,456,626	\$533,012,6

a. Includes data from Prairie Habitat Joint Venture - Alberta (Source: NAWMP National Tracking System).

 $^{^{*}\,}$ New contributor in 2017-18

AGENCY	ACTIVITY	EXPENDITURES 2017-18	HABITAT ACRES 2017-18	NET HABITA ACRES 1986-201
ALBERTA AGRICULTURE AND FORESTRY (includes Agriculture and Agri-Food Canada, a former Alberta NAWMP partner)	Securement			425,19
ALBERTA ENVIRONMENT AND PARKS	Securement			10,50
DUCKS UNLIMITED CANADA	Communication and education	\$198,344		
	Conservation planning	\$1,611,495		
	Habitat Joint Venture science	\$195,834		
	Habitat restoration	\$5,784,753	43,241	1,071,48
	Habitat retention (≥10 years through permanent)	\$7,521,541	9,275	2,342,61
	Habitat retention (<10 years)	\$480,542		96,60
	Land and water policy support	\$263,683		
	Management (habitat assets)	\$4,149,537		2,561,08
DUC Total Expenditures		\$20,205,729		
ENVIRONMENT AND CLIMATE CHANGE CANADA – CANADIAN WILDLIFE SERVICE	Communication and education	\$5,000		
	Conservation planning	\$7,334		
	Habitat Joint Venture science	\$55,850		
	Land and water policy support	\$8,333		
ECCC Total Expenditures		\$76,517		
NATURE CONSERVANCY OF CANADA	Conservation planning	\$14,836		
	Habitat restoration			73,01
	Habitat retention (≥10 years through permanent)	\$17,651		51,55
	Habitat retention (<10 years)	-\$36		
	Management (habitat assets)	\$329,559	45,458	1,445,69
NCC Total Expenditures		\$362,010		
OTHER AGENCIES	Communication and education, Habitat restoration, Habitat Joint Venture science	\$169,725	124	4,14
TOTAL EXPENDITURES, 2017-18		\$20,813,981		

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 by partners 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.
- Conservation planning: biological, agrological and engineering planning and targeting activities that occur prior to actual program delivery.
- Habitat restoration: actions to increase carrying capacity for wetland-associated migratory birds and other wildlife.
- Habitat Joint Venture science: activities that evaluate the effects and inform future improvement of the NAWCA program throughout the Prairie Habitat Joint Venture.

- Management (habitat assets): actions to maintain carrying capacity for wetland-associated migratory birds and other wildlife on habitat retained for ≥10 years through permanent.
- 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.
- 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.

Habitat Acres:

- Habitat Acres, 2017-18: habitat acres retained, restored or managed between April 1, 2017 and March 31, 2018. NOTE: total acres are not cumulative.
- Net Habitat Acres, 1986-2018: cumulative total of habitat acres since 1986, less expired agreements.

COOPERATORS

101105170 Saskatchewan Ltd.

1187397 Alberta Ltd.

Access Land Services Ltd.

Access Pipeline Inc.

Acquired Land Management Inc.

Action Energy Inc.

Action Land Consultants (2001) Ltd.

Advance Land Services

Advantage Oil & Gas Ltd.

Agricore United

Agriculture and Agri-Food Canada

Agriculture and Agri-Food Canada - Prairie Farm

Rehabilitation Administration

Agriculture and Food Council of Alberta

Agriculture Financial Services Corporation

Aguila Exploration Consultants Ltd.

Ainsworth Lumber Company Ltd.

Alberta Agriculture and Forestry

Alberta Association of Municipal Districts and Counties

Alberta Beef Producers

Alberta Community Development

Alberta Conservation Association

Alberta Conservation Tillage Society

Alberta Culture and Community Spirit

Alberta Ecotrust Foundation

Alberta Energy and Utilities Board

Alberta Environment and Parks

Alberta Environmental Farm

Plan Company

Alberta Fish and Game Association

Alberta Land and Lease Limited

Alberta Municipal Affairs

Alberta Native Plant Council

Alberta Research Council

Alberta Reduced Tillage LINKAGES

Alberta Sport, Recreation, Parks and

Alberta Transportation

Alberta Treasury

Alberta-Pacific Forest Industries Inc.

Alliance Pipeline Limited Partnership

Alonsa Conservation District

Alta Canada Energy Corporation

Alta Energy Corporation

AltaGas Services Inc.

Amar Developments Ltd.

Anadarko Canada Corporation

Anderson Exploration Ltd.

Anonymous Foundation

Antelope Creek Habitat Development

Antelope Land Services Ltd.

Apache Canada Ltd.

ARC Resources Ltd.

Arctos Land Corporation

Argent Energy Inc.

Arizona (State of)

Armett & Burgess Oilfield

Construction Ltd.

Artek Exploration Ltd.

Artemis Energy

Artemis Exploration Inc.

Aspen Endeavour Resources Inc.

Assiniboine Watershed Stewardship Association

ATB Financial

ATCO Electric Ltd.

ATCO Gas

ATCO Structures & Logistics Ltd.

Atlas Land Consultants Ltd.

Aurora Land Consulting Ltd.

Avalanche Energy Limited

Avid Oil & Gas Ltd.

B P Canada Energy Company

Barbeejay Supplies Ltd.

BASF Canada Inc.

Battle River Credit Union Ltd.

Bayer CropScience Canada

Bayer CropScience Inc.

Baytex Energy Ltd.

Beaver County

 $Be a verbrook\ Development\ Inc.$

Beaverhill Lake Nature Centre

Ben's Trucking and Landscaping Big Country Energy Services LP

Big Hay Lake Drainage District

Big Lake Environment Support Society

Bighorn Land & Field Service Ltd.

Birchcliff Energy Ltd.

Bonavista Energy Trust Ltd.

Bonavista Petroleum Ltd.

Bonnyville (Municipality of)

Bow River Irrigation District

Bowest Consulting Ltd.

Bowood Energy Corp.

Boyd Petro Search

Brigus Resources Ltd.

British Petroleum Canada

Britt Resources Ltd.

Buffalo Resources Corp.

Burlington Resources Inc.

Byrne's Agri Service Ltd.

Cabre Exploration Ltd.

Cabrerra Resources Limited

Calgary (City of)

California Department of Fish and Game

California (State of)

Cameron Development Corporation

Camrose County

Canada Capital Energy Corporation

Canada Malting Co. Ltd.

Canada private - unspecified

Canada Trust Friends of the

Environment Foundation

Canada West Land Services Ltd.

Canadian Cattlemen's Association

Canadian Circumpolar Institute

Canadian Forest Products

Canadian Potest 1 foducts

Canadian Landmasters Resource

Services Ltd.

Canadian National Railway

Canadian Natural Resources Ltd.
Canadian Nature Federation

Canadian Nature rederatio

Canadian non-government organizations - unspecified

Canadian Pacific

Canadian provincial - unspecified

Canadian Superior Energy Inc.

Canadian - unspecified

Canadian Water Resources Association

Canetic Resources Trust

Cannat Resources Inc.





Capitol Energy Resources Ltd.

Cargill Inc.

Caribou Land Services

Carlton 142 Inc.

Carriage Lane Estates Inc.

Carstairs (Town of) Cavalier Land Ltd. Celtic Exploration Ltd.

Cenovus Energy Inc. Central Alberta Rural

Electrification Association Central Global Resources, ULC

Centrica Canada Limited

Challenger Development Corporation

Chamaelo Energy Choice Resources Corp. Circle E Grazing Association Clear Environmental Solutions Inc.

Climate Change Central Coal Valley Resources Inc. Coastal Resources Ltd. Cochin Pipe Lines Ltd.

Colonsay No. 342 (Rural Municipality of)

Colorado (State of)

Commonwealth Construction

Company Ltd.

Compara Energy Services Inc. Complete Exploration Services Ltd.

Complete Land Services Ltd. Compton Petroleum Corporation

Conoco Phillips Canada

Conservation International Bahamas

Cordero Energy Inc.

Cornerstone Agri-Environmental

Group Plan

Cossack Land Services Ltd. Cowie Cattle Company Ltd. Crescent Point Resources Limited Partnership

Crew Energy Inc. Crispin Energy Inc.

Cropmasters

CrossAlta Gas Storage & Services Ltd.

Crystal Landing Corporation

Culane Energy Corporation Cygnet Lake Drainage District

D.J. Old Ltd.

Data Trek Exploration (1986) Ltd.

Davis LLP

Daylight Energy Ltd. Decker Petroleum Ltd. Delphi Energy Corp. Delta Waterfowl Foundation Desmarais Energy Corporation Devon Canada Corporation Dirham Construction Ltd. Dominion Energy Canada Ltd.

Dow AgroSciences Dox Investments Inc. Ducks Unlimited Canada Ducks Unlimited Inc.

E-Bay Oilfield Contracting Inc. Eastern Irrigation District

Echoex Ltd. Edmonton (City of)

Edmonton Community Foundation Edmonton Springer Spaniel Club Edwards Land (Calgary) Ltd. Elfros No. 307 (Rural Municipality of)

Emerald No. 277 (Rural Municipality of)

Enbridge Inc. Enbridge Pipelines Inc. EnCana Corporation

ENDEV Resources Partnership

EnerMark Inc. Enterra Energy Corp.

Environment and Climate Change Canada - Canadian Wildlife Service

Environment and Climate Change Canada - EcoAction Environment and Climate Change Canada - Habitat Stewardship Program

Environment and Climate Change Canada - Natural

Areas Conservation Program Environmental Law Centre EOG Resources, Inc. Equatorial Energy Inc. Esprit Exploration Ltd.

Evolve Surface Strategies Inc.

Exalta Energy Inc.

ExxonMobil Canada Energy Fairmount Energy Inc.

Federation of Saskatchewan Indian Nations

Feed-Rite Ltd

First National Properties Group Fisheries and Oceans Canada

Flagstaff County

Fletcher Challenge Canada Ltd.

Flexi-Coil

Foothills Pipe Lines Ltd.

Forest Products Association of Canada

Fortis Alberta Inc.

FRC Alberta Properties, Inc. Friends of the Nature Conservancy

Galfour Development Corporation

Galleon Energy Inc.

Genstar Development Partnership

Gentry Resources Ltd. Geoid Exploration Ltd.

George Cedric Metcalf Foundation

GeoTir Inc.

Grand Petroleum Inc. Grande Prairie (City of) Grande Prairie County Grandir Resources Ltd. Gray Diamond Construction

Green Drop Ltd. Green-Con Lands Ltd.

Greenview (Municipal District of) Habitat Conservation Trust Fund

Habitat For Humanity Harbinger Exploration Inc.

Harvest Energy

Hasco Development Corporation Heritage Surface Solutions Ltd. HMA Land Services Ltd. Hopewell Development Corporation

Horizon Land Services Ltd. Horseshoe Land Ltd.

Hughes Oilfield Construction Ltd. Human Resources and Skills Development Canada



Husky Group of Companies Husky Oil Operations Ltd.

Impact 2000 Inc.

Imperial Oil Charitable Foundation Imperial Oil Resources Ltd.

Indian and Northern Affairs Canada

Inglewood Bird Sanctuary Inland Cement Ltd. Institute for Wetland and Waterfowl Research

Integrated Geophysical Consultants Ltd.

Integrity Land Inc. Inter Pipeline Fund

Interlake Grasslands Society

International Association of Fish & Wildlife Agencies

Invermay (Rural Municipality of)

IPSCO Inc.

Irene W. and C.B. Pennington Foundation
Izaak Walton Killam Memorial Scholarship

Jacqui Shumiatcher S.O.M., LL.D.

Jaffer Real Estate Limited Partnership III Inc.

James L. Baillie Memorial Fund James Richardson International

JED Oil Inc. Kanover Ltd.

Kelkyd Holdings Ltd.

Kellross No. 247 (Rural Municipality of) Keyera Energy Facilities Limited

KeyWest Energy Corporation Kinder Morgan, Inc. Kinsmen Club of Yorkton

Krang Energy Inc.

L. Griffin Management Inc.

Lac La Biche Feed Mill & Farm Supply Ltd.

Lacombe County

Lakeland (County of)

Lakeland Industry &
Community Association

Lamco Gas Co-op Ltd.

Lamont County

Lamont Gas Co-op Ltd.

Land Solutions Inc.
Land Stewardship Centre of Canada

Landquest Services Ltd.

Landwest Resource Services Ltd.

Lane Land Services Ltd.
Little Saskatchewan River
Conservation District
Lockhorn Exploration Ltd.

Logistex Land Services Ltd.

Longstaff Land Surveying Ltd.

Loose Foot Computing Limited

Lower Souris River Watershed

Committee Inc.

Lucas Bowker & White

Luscar Ltd.

LXL Consulting Ltd.

Majestic Land Services Ltd.

Mamba Production Partnership

Manawan Drainage District

Mancal Corporation

Manitoba Agriculture, Food and

Rural Initiatives

Manitoba Conservation

Manitoba Finance

Manitoba Forage Council

Manitoba Habitat Heritage Corporation

Manitoba Hydro

Manitoba Transportation and Government Services Manitoba Water Stewardship Manitoba Wildlife Federation

Habitat Foundation

Manitok Exploration Inc.

Maverick Land Consultants Inc.

Maxi Services Ltd.

McNally Land Services Ltd.
MEC Operating Company
Medicine Hat (City of)
Meewasin Valley Authority
Meighen Haddad & Co.
Melcor Developments Ltd.

Melfort (City of) MGV Energy Inc.

Millennium Bureau of Canada

Minburn County

Minco Gas Co-op Ltd.

Ministry of Sustainable Resource Management

Montana (State of)
Montane Resources Ltd.
Moose Mountain Buffalo Ranch
Mor-West Ventures Inc.
Mountain Equipment Co-op
MSL Land Services Ltd.
Murphy Oil Company, Ltd.

Monsanto Canada

NAL Oil & Gas Trust NAL Resources Limited

National Fish and Wildlife Foundation Native Plant Society of Saskatchewan Natural Sciences and Engineering Research Council of Canada

Nature Alberta Nature Canada

Nature Conservancy of Canada

Nature Saskatchewan Navigo Energy Partnership

Newell County

Newport Petroleum Corporation

Nexen Inc.

Nicholson Land Service Ltd. Niven & Associates Inc.

Norcana Resource Services (1991) Ltd.

Nordic Pressure Services Inc. North West Upgrading Inc. Northpoint Development L.P. Northrock Resources Ltd. (Canada)

NWT Resources, Wildlife and Economic Development

OH Ranch Ltd.

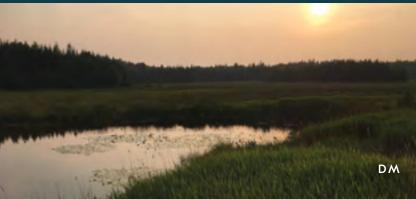
Oil-Expo Investments Ltd.

Olds College

Omera Resources Limited
Omers Energy Inc.
Oregon (State of)

Outlook Energy Corporation
OutSource Seismic Consultants Inc.
Pan Canadian Petroleum Limited

Pangea Land Ltd.
Paramount Energy Trust
Park Paving Ltd.





Park Ridge Homes Ltd.
Parkland Conservation Farm

Parkland County Parks Canada

Parks Canada - Elk Island National Park Partners in Habitat Conservation (EID)

PB Industries Ltd.

PCL Construction Management Inc.

Peace Parkland Native Stewardship Program Peace Parkland Naturalists Pengrowth Corporation Penn West Petroleum Ltd. Petro Line Upgrade Services Ltd.

Petro-Canada
Petrofund Corporation
Petroland Services Ltd.
Petrolane Consulting Ltd.
PEW Charitable Trusts

Pew Charitable Trusts
Pheasants Forever
Pickseed Canada Inc.
Pioneer Land Services Ltd.

Pioneer Professional Services Group

Ponoka County

Poplar Hill Resources Ltd.

PotashCorp

Prairie Land & Investment Services Ltd.

Prairie Land Consultants Inc. Prairie Land Service Ltd. Prairie Mines and Royalty Ltd.

Prairie Plantation Inc.
Prairie Roadbuilders Limited
Price Waterhouse Coopers
Prime Seismic Data

Prime West Energy Inc.
Priority Printing
Progress Energy Ltd.
Progress Land Services Ltd.
Progressive Exploration Services

Prospect Land Services (Alta) Ltd. Prospect Oil and Gas Management Ltd.

Public Works and Government

Project Second Life Society

Services Canada

Qualico Developments Ranger Land Services Ltd. Ravenswood Developments Inc.

RBC Royal Bank Real Resources Inc. Red Deer County

Remington Development Corporation Renton Land Services (1983) Ltd. Repsol Oil & Gas Canada Inc. Resolution Land Services Ltd.

Richard H. G. Bonnycastle Graduate Fellowship

Richardson Foundation Inc.
Richland Petroleum Corporation

Rife Resources Ltd. Rival Energy Ltd.

Road Runner Land Group Ltd.

Rocky Mountain Elk Foundation - Canada

Rocky Mountain Property, Inc.

Rocky View County

Rockyview Energy Partnership Rockyview Gas Co-op Ltd. Roger Hagen Construction Inc. Rosevear Land Services Ltd. Roy Northern Land Service Ltd. Royal Oaks II Joint Venture Sabretooth Energy Ltd. Samuel Hanen Society for Resource Conservation

Saskatchewan Agriculture, Food and Rural Revitalization Saskatchewan Conservationist Saskatchewan Council for

Community Development

Saskatchewan Crop Insurance Corporation

Saskatchewan Environmental

Protection Fund

Saskatchewan Finance

Saskatchewan Fish and Wildlife Development Fund

Saskatchewan Government Relations

and Rural Affairs

Saskatchewan Minerals

Saskatchewan Stock Growers Association Saskatchewan Water Security Agency

Saskatchewan Wetland Conservation Corporation Saskatchewan Wildlife Federation

Saskatoon (City of) SaskEnergy Incorporated

SaskPower SaskTel

SBW Cattle Company Ltd. Scott Land and Lease Ltd. Seamac Land Services Ltd. Search Energy Corp.

SeCan

Seisland Surveys Ltd. Serrano Energy Ltd. Shell Canada Products Ltd.

Shell Conservation Internship Program

Shell Environmental Fund Shepard Limited Partnership Shiningbank Energy Income Fund

Sierra Vista Energy Ltd. Signalta Resources Limited Silverado Properties Ltd. Sims and Company Skana Exploration Ltd.

Skelton and Company Law Office Slave Lake Pulp Corporation Soil Conservation Council of Canada South Peace Wilderness Society Southern Alberta Land Trust Society

Special Areas Board Spur Resources Ltd.

Spy Hill (Regional Municipality of)

St. Albert (City of)

St. Mary River Irrigation District

St. Paul County

Standard Land Company Inc.

Star Oil & Gas Starboard Gas Ltd. Stettler County

Strategic Land Services Inc. Strathcona County Strathmore (Town of) Sturgeon County

Suncor Energy Inc.

Sundance Forest Industries Inc.





Sundance Land Services Ltd.
Sunwest Canada Energy Limited
Sustainable Forest Management Network

Sylvan Lake (Town of) Synergy Land Services Ltd. Syngenta Crop Protection Inc. Synterra Technologies Ltd.

Takota Land Ltd.
Talisman Energy Inc.
Tappit Resources

Tasman Exploration Ltd.

TD Canada Trust
TD Friends of the
Environment Foundation

Tempest Energy Corporation
TERA Environmental Consultants

Terra-Sine Resources Ltd.

Tervita

The Calgary Foundation

The Donner Canadian Foundation

The Flanagan Foundation

The J.W. McConnell Family Foundation

The Kahanoff Foundation
The Nature Conservancy

The W. Garfield Weston Foundation

The Woodcock Foundation
Thompson & Associates, Inc.

Thunder Energy Inc.

TNC Wilson Challenge Fund

Tofield (Town of)

Touchdown Land Consultants Ltd.
Tourism for Tofield Foundation
Tournament Exploration Ltd.

TransAlta Corporation

TransCanada Corporation
Transfeeder Inc.

TransGas Limited
Traverse Landgroup Ltd.
Trident Exploration Corp.
Trilogy Energy Corp.
TriStar Oil & Gas Ltd.

Triton Energy Corporation True Energy Inc. Tudor Corporation Ltd.

Tundra Oil and Gas, Limited

Turtle Mountain Conservation District

Twin Butte Energy Ltd.
Two Hills (County of)
Union Pacific Resources Ltd.
United Farmers of Alberta
United Grain Growers

United States Department of Agriculture -

Forest Service

United States Fish and Wildlife Service

United States state governments – unspecified United States – other University of Alberta University of Calgary University of Lethbridge University of Regina Univex Land Services Upper Assiniboine River Conservation District

Val Vista Energy Ltd. Venturion Natural Resources Limited

Vermilion Energy Trust Vermilion Resources Vermilion River (County of)

Viterra

Vonda (Town of)

VSD Developments Corporation

Vulcan County

Wainwright (Municipal District of)

WAM Development Group

Wave Energy Ltd. Wayco Land Services Western Feedlots

Western Irrigation District Westfire Energy Ltd.

Weyerhaeuser

Wheatland County

Wheatland Industrial Park Inc. Wilburforce Foundation

Wildlife Habitat Canada

William H. Donner Foundation

Winnipeg (City of)

World Wildlife Fund Canada

Wyoming (State of)

Yorkton Wildlife Federation

Yukon Department of Energy, Mines and Resources

Zahmol Properties Ltd.

Zapata Energy Corporation

Zargon Energy Trust

Zargon Oil & Gas Ltd.

PHOTO CREDITS

ABMI Alberta Biodiversity

Monitoring Institute

BJ Brittany Jackson, North Saskatchewan Watershed Alliance

DC Darwin Chambers,
Ducks Unlimited Canada

DM Dave Mussell, Alberta Environment and Parks

DUC Ducks Unlimited Canada

MD Matt Dyson, Fedy Lab, University of Waterloo

ME Mara Erickson, North Saskatchewan Watershed Alliance



North American Wetlands Conservation Act





Environment and Climate Change Canada Environnement et Changement climatique Canada







FOR MORE INFORMATION ABOUT THE ALBERTA NORTH AMERICAN WATERFOWL MANAGEMENT PLAN (ALBERTA NAWMP) PARTNERSHIP, CONTACT:

Terra Simieritsch

Alberta NAWMP Coordinator

t_simieritsch@ducks.ca

Or visit abnawmp.ca

FOR MORE INFORMATION ABOUT ALBERTA NAWMP ACTIVITIES, CONTACT:

Paul Jungnitsch Alberta Agriculture and Forestry paul.jungnitsch@gov.ab.ca

Cathy MacKenzie

Ducks Unlimited Canada (Prairies)
c_mackenzie@ducks.ca

Nicola Maule

Environment and Climate Change Canada
nicola.maule@canada.ca

Raina Mithrush

Ducks Unlimited Canada (Boreal)
r_mithrush@ducks.ca

Dave Mussell Alberta Environment and Parks dave.mussell@gov.ab.ca

Carys Richards

Nature Conservancy of Canada

carys.richards@natureconservancy.ca