# **Wetland Education Network Pilot**

# **Summary Report**

By: Lilium Consulting

#### **APRIL 2017**

Prepared for: North American Waterfowl Management Plan Partnership

We wish to extend a special thanks to all of the individuals who participated in the Wetland Education Network pilot and workshop, providing their feedback and engaging in the collaborative sessions.

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#### 1.0 Introduction

The Government of Alberta has implemented a province-wide Wetland Policy in order to address the great deal of wetland loss that has been occurring across Alberta for decades. The policy, which has a goal to "conserve, restore, protect and manage Alberta's wetlands to sustain the benefits they provide to the environment, society, and the economy", includes both regulatory and non-regulatory means. While the emphasis of the Wetland Policy is on the regulatory aspects of wetland management, there is also an acknowledgement of the role that wetland education and outreach will play for the policy to reach its goal successfully.

There are numerous wetland educators throughout Alberta, however education and outreach efforts have been occurring in an independent and non-coordinated fashion. The Alberta North American Waterfowl Management Plan (AB NAWMP) Partnership recognized the value in having wetland educators work collaboratively, and created the multi-stakeholder Wetland Education and Outreach Working Group in order to create a conceptual framework for a coordinated wetland education and outreach program.

The conceptual framework created by the Wetland Education and Outreach Working Group included an annual meeting for the wetland education community, a steering committee for future collaborations, and sector working groups (hereby referred to as Action Groups). The purpose of these meetings and groups being to identify wetland education needs, tools and products to improve the wetland education and outreach efforts in Alberta.

In order to follow through with the conceptual framework designed by the Wetland Education and Outreach Working Group, a pilot was created to gather each of the four Action Groups together for two half-day meetings a piece, to examine the wetland education and outreach needs of the particular sectors. In order to focus the meeting content and provide the opportunity to find synergies across the Action Groups, the members of each group were asked to concentrate on basic wetland education (i.e. basic wetland identification and function), and avoid some of the other topics of wetland education (e.g. understanding the Wetland Policy, roles and responsibility of specific groups, technical wetland topics, etc.).

The Wetland Education Network pilot Action Groups were populated with leadership from AB NAWMP, and Lilium Consulting facilitated the process. Individual proceeding reports were completed for each of the Action Groups, summarizing the ideas that were brought forward in the Wetland Education Network pilot meetings.

After the Action Groups had completed their meetings, a Wetland Education Network workshop was hosted by the AB NAWMP partnership in order to bring together the broader wetland education community to collect ideas around a vision to move the Wetland Education Network forward.

This report provides an overall report of the key findings of the Wetland Education Network pilot and workshop and provides recommendations based on the opinions of the broader wetland education community.

## 2.0 Wetland Education Network Pilot Action Group Meetings

The Wetland Education Network pilot sought to identify sector wetland education and outreach needs, and potentially identify wetland education tools and delivery mechanisms. An emphasis was put on encouraging sector groups to work collaboratively and to allow individuals in a given sector working on wetland education to network and share resources.

The initial AB NAWMP Partnership Wetland Education and Outreach Working Group created a conceptual structure of a Wetland Education Network that included a broad wetland education community, a Steering Committee, and a Coordinator to support the sector Action Groups (AB NAWMP Wetland Education and Outreach Working Group 2016). The initial conceptual structure included four Action Groups (Agriculture, Industry, Municipal and Public and Education), the structure that was updated with feedback from the Wetland Education Network pilot findings also included a fifth Action Group, the Government of Alberta(GoA) (Figure 1). Individuals in various Action Groups felt that the addition of a GoA Action Group was needed in order to address some of the wetland knowledge gaps they sometimes faced when discussing wetland challenges with GoA staff. This GoA Action Group was suggested over the course of the pilot, and therefore there was no GoA Action Group during the Wetland Education Network pilot, although the GoA did participate in many of the other Action Groups.

**Conceptual Structure of WEN Wetland Education Community** -meets annually, sets direction and reviews progress Coordinator **Steering Committee** -supports -Coordinates annual events, supports Coordinator and Action develops network communication tools Groups Public and Government Industry Agriculture Municipal Education of Alberta Action Action Action Action Action Group Group Group Group Group

Figure 1. Conceptual Structure of a Wetland Education Network

\*Green Action Groups: meet periodically to develop education and outreach tools that build awareness, provide knowledge, attitudes and skills and move Albertans to action!

The Wetland Education Network pilot Coordinator (Lilium Consulting), worked in conjunction with the AB NAWMP partnership to populate the Action Groups with individuals who were able to speak on behalf of their network on the topic of wetland education and outreach. The Action Groups were considered to be a representative cross-section of individuals, and not intended to be inclusive of all types of individuals in a given sector. The Action Groups were categorized into the following:

- Agriculture,
- Industry,
- Municipal, and
- Public and Education.

Action Group members were provided with a Terms of Reference (see Appendix A), to outline their responsibilities within the Wetland Education Network pilot.

It became apparent early in the Action Group meetings that many topics could fall under the umbrella of wetland education, including topics relating to wetland policy, roles and responsibilities, economics, and technical capacities. The decision was made to limit the scope of the Wetland Education Network pilot to basic wetland education, or 'wetlands 101' in order to focus the conversations and have the ability to contrast and compare what the different Action Groups came up with over the course of their meetings.

The Action Group members shared existing wetland education and outreach programs that were being used in their particular sector or workplace and noted whether or not they felt those programs were effective in increasing the level of wetland knowledge to their intended audiences. Some Action Groups had extensive lists of wetland education and outreach programs, while others struggled to come up with any.

Once lists of current wetland education and outreach programs were established, the Action Group members moved on to categorizing where they understood their particular sector fit on the Literacy Ladder established by the initial AB NAWMP Wetland Education and Outreach Working Group (Figure 2). Each Action Group had a Literacy Ladder specific to their sector, with descriptions of what each 'rung' would have as a potential outcome.

Figure 2. Basic Literacy Ladder Categories

| Ladder Steps | Outcome (individuals groups had unique outcomes) |
|--------------|--|
| Action       |  |
| Skills       |  |
| Attitudes    |  |
| Knowledge    |  |
| Awareness    |  |

Once the Action Group had a good idea of where their sector should be placed on a Literacy Ladder, they each came up with an extensive list of audiences that require wetland education programs. The groups were then tasked with identifying one or

two key audiences to focus on for the purpose of the pilot. All of the Action Groups chose key audiences that fell under either the 'awareness' or 'knowledge' categories of the Literacy Ladder. These particular key audiences were noted as being ideal candidates for a basic level wetland education program which was the focus of the Wetland Education Network pilot.

Once key audiences were chosen, the Action Groups were asked to identify wetland education and outreach program ideas, key messages and delivery mechanisms for those key audiences. The responses from the Action Groups discussions are summarized in Table 1. The Public and Education Group decided to split their Action Group into sub-groups to discuss the key wetland education topics, as they felt their group was too diverse to be able to have general themes be representative. This is the reason that the Public and Education Action Group portion of Table 1 includes many more responses than the other Action Groups. The detailed themes for each sub-group are available in the Public and Education Action Group Summary Report.

Table 1. Synopsis of Wetland Education Key Audiences, Program Ideas, Key Messages and Delivery Mechanisms as Identified by the Action Group in the Wetland Education Network Pilot

| Action      | Key              | Program Ideas       | <b>Key Messages</b> | Delivery             |
|-------------|------------------|---------------------|---------------------|----------------------|
| Group       | Audience(s)      |                     |                     | Mechanisms           |
| Agriculture | -Commodity       | -A wetland module   | "How are            | -Incentive programs  |
|             | Groups           | in the              | wetlands            | -Relationship        |
|             |                  | Environmental       | relevant to my      | building             |
|             |                  | Farm Plan           | operation?"         | -Commodity Group     |
|             |                  | -Prepared materials |                     | newsletters,         |
|             |                  | to send out via     |                     | magazines, etc.      |
|             |                  | Commodity Group     |                     | -Presentations and   |
|             |                  | communications      |                     | information booths   |
| Industry    | -Individuals     | -Industry Action    | "Wetlands           | -Accredited course   |
|             | working in Pro-  | Group designed      | effect how you      | (potentially online) |
|             | 10 Association   | Basic Wetland       | work on the         | -In-person           |
|             | Groups           | Education Course    | landscape"          | presentations        |
| Municipal   | -Planning and    | -Municipal Action   | "Wetlands are       | -Group               |
|             | Development      | Group created:      | a shared            | endorsement of the   |
|             | staff (including | Your Guide to       | responsibility      | guide                |
|             | consultants)     | Making Wetlands     | and we can          | -Webinars            |
|             | -Chief           | Work in Your        | help you"           | -Field tours         |
|             | Administration   | Municipality        |                     |                      |
|             | Officers         | (released March     |                     |                      |
|             |                  | 2017)               |                     |                      |
| Public and  | -Educators       | -Wetland learning   | "Why                | -Hands-on            |
| Education   | - Specialist     | and activity        | wetlands?"          | approaches to train  |
|             | Councils         | directory           |                     | educators            |
|             | -Advisory        | -Case studies of    |                     | -Solve wetland       |

| Councils    | wetland challenges  | challenges for credit |
|-------------|---------------------|-----------------------|
| -Recreation | alists to 'solve'   | -Wetland app and      |
| - Employees | s at -Local wetland | positive signage      |
| the Indigen | ous knowledge       | -Traveling wetland    |
| Knowledge   | -Wetland learning   | field kit             |
| Wisdom Ce   | ntre kit            |                       |

<sup>\*</sup>Note: Please see individual Action Group proceedings reports for further detail on all categories in Table 1.

Table 1 highlights some of the key findings of the Action Groups and shows the diversity of the discussions that were had during the Wetland Education Network pilot. The information in Table 1 is however a very cursory overview of some of the key findings, and the proceedings reports (available through AB NAWMP) provide details on the background conversations that led to the key findings, as well as more detail on the various topics that the Action Groups covered.

#### 2.1 Common Themes

The Wetland Education Network Action Groups were unique in how each group operated, interacted and in their key findings, however there were also some commonalities that emerged throughout the process across the various groups. Focusing the Wetland Education Network pilot on basic wetland education and outreach needs allowed these commonalities to emerge.

#### 2.1.1 Personal Connection

The main commonality that was noted throughout all of the Action Group discussions was the need to ensure that the key audiences (those receiving the wetland education program) were given an opportunity to form personal connection to wetlands in order to keep them engaged and understand the importance of wetland functions. The personal connection piece was slightly different for each group. The key messages created by the Action Groups speak to the need for personal connection to wetlands:

The Agriculture Action Group spoke of the need to educate producers on the importance of wetlands in their particular operation, and how knowing more about wetlands was important if they had wetlands on their land:

### "How are wetlands relevant to my operation?"

The Industry Action Group pointed out that wetland education materials need to be tailored to individual industries and jobs, and include case studies that underline the importance of being educated about wetlands. The key message that encompassed the discussion was:

#### "Wetlands effect how you work on the landscape".

The Municipal Action Group wanted to educate their key audiences on the relevancy of wetlands to their positions, and understand that it was in fact part of their responsibility to understand and plan for wetland health:

#### "Wetlands are a shared responsibility and we can help you".

Many of the Public and Education Action Group discussions centered around creating personal connections to wetlands through wetland education and outreach. This is one of the reasons that there was emphasis put on incorporating local wetland knowledge and experiences in wetland education programs. The key message that the group came up with related to really getting down to the core reasons that their key audiences should care about wetlands:

#### "Why wetlands?"

These personal connection discussions all related back to ensuring that the topic of wetlands was relevant to the audience in a way that would encourage them to be engaged in wetland education programs and outreach.

#### 2.1.2 Field Courses

The Wetland Education Network Pilot Action Groups all brought up the importance of having a field component in wetland education programs and outreach whenever possible. It was agreed upon by group members that the physical experience of being in wetland habitat was much more powerful for creating a personal connection to a wetland than simply reading about and understanding wetlands on an intellectual level.

One of the secondary key messages of the Municipal Action Group reflected the importance of having a field component in a wetland education program:

#### "To make good decisions, you need to get your feet wet".

Many of the existing wetland education programs that were brought up by Action Group members as successful included a field component that brought program participants out to view, or have an interaction with wetlands.

#### 2.1.3 Using Existing Resources

There was recognition throughout the Wetland Education Network pilot meetings that it was important to ensure that wetland education and outreach programs were created and delivered as efficiently as possible, in terms of timing and associated costs. A common theme throughout the discussions with the various Actions Groups was one of not re-inventing the wheel, in other words, ensuring that existing

wetland education programs were not being duplicated. While most of the Action Groups were unable to identify really effective wetland education and outreach programs for their chosen key audiences, there was a sense from group members that there were likely resources that could serve their purpose that they weren't aware of. There was discussion that if there were reputable basic wetland education programs in existence, that they could be tailored to meet the needs of specific sectors.

The Action Group members also discussed that it was important to ensure that the wetland education resources they were accessing were reputable and could be trusted as scientifically accurate. A process to determine reputable resources was not pursued, however Action Group members noted that trusted groups working on wetland issues could help determine program accuracy.

The Action Groups were keen to discuss the importance of a collaborative framework for wetland education needs. All of the Action Groups were interested as to what the other Action Groups had discussed and what potential crossovers there were between groups throughout the Wetland Education Network Pilot.

#### **2.2 Cross-group Interests**

There were various cross-group interests that became apparent through the Wetland Education Network pilot process. Some specific examples of the cross-group interests were as follows:

- The Industry and Agriculture Action Groups were interested in having wetland education occur at a post-secondary education level in order to have individuals entering their sectors already aware and engaged on topics and challenges related to wetlands;
- The post-secondary portion of the Public and Education Action Group
  wanted to ensure that students had knowledge and field skills pertaining to
  wetlands before entering the workforce, and that those students were aware
  of wetland challenges and possessed the skills to take action in a practical
  way; and
- The Municipal Action Group wanted access to resources created in the Agriculture, Industry and Public and Education Action Groups, as they were all sector groups that municipal staff crossover with on a regular basis.

These cross-group interests show the value and need of a collaborative process, such as a Wetland Education Network, for wetland education and outreach in Alberta.

## 3.0 Wetland Education Network Workshop

The initial AB NAWMP Wetland Education and Outreach Working Group had an annual meeting of the broader Wetland Education Network community as part of their conceptual framework. In order to complete the pilot, the AB NAWMP Partnership hosted a Wetland Education Network workshop on March 15, 2017 in Leduc, Alberta as per the suggestion of the working group.

Approximately 50 participants attended the Wetland Education Network workshop from many different sectors and regions of Alberta.

The desired outcomes of the workshop were to:

- Allow individuals interested or engaged in wetland education to have an opportunity to meet and network;
- Highlight the key findings of the Wetland Education Network pilot;
- Feature examples of successful wetland education programs and outreach efforts; and
- Test for interest in and create a vision for an inclusive, cross-sector Wetland Education Network.

Participants were given an overview of the Wetland Education Network pilot and the Action Group findings before listening to a panel of Action Group member representatives re-iterate their experience of participating in the pilot. Workshop participants were asked to then cycle through 4 case studies to learn from successful examples of wetland education programs in Alberta, chosen by AB NAWMP and Lilium Consulting.

Workshop participants then spent the remainder of the day in cross-sector breakout groups, answering questions to gauge interest in a Wetland Education Network and to inform a vision of what the network could look like going forward.

Overall there was resounding support for the establishment of a Wetland Education Network in the breakout groups. The breakout groups also supported the concept of having a Coordinator for the Wetland Education Network in order to provide leadership to the Action Groups and tie the work of the Action Groups to a steering committee and to the broader Wetland Education Network community. The desired skill set for a Wetland Education Network Coordinator included strong project manager abilities with excellent facilitation and communication skills (a strong wetland science background was not considered a requirement).

Workshop participants indicated the need for Action Groups to crossover with each other to ensure that redundancies are avoided and that all group members benefit from wetland education resources being produced under the banner of the Wetland

Education Network. The Wetland Education Network Coordinator was noted as being the best potential link between the Action Groups.

Workshop participants also noted each Action Group should have leadership in the form of a chairperson and potentially a co-chairperson as well. While many felt that the Wetland Education Network pilot Action Group members were a good cross-section to start the network, many wanted to see the process of recruiting Action Group members opened up to receive recommendations on the best individuals to participate. Representation from the provincial government in each of the groups was noted as an idea, as well as the potential to have more regional representation from across the province. Linking to broad organizations and associations was one method identified to ensure fair representation on the Action Groups.

The workshop participants spoke to the need for structure in the network and in the Action Groups, and expressed interest in having Terms of Reference for each Action Group as well as clear expectations on process and deliverables for participation in the Wetland Education Network.

Communication is considered a key aspect of the Wetland Education Network and workshop participants were asked to weigh in on the means of communication for wetland education and outreach. The importance of receiving updates on Wetland Education Network documents and events was noted by participants, and while a website was seen as important, participants voiced that it would be best to use a pre-existing website. The participants voiced concern over the quality of content that would potentially get posted to a Wetland Education Network hub (website), and this echoed the concerns around finding scientifically sound information brought forward in the pilot by the Action Groups. It was recommended that wetland education information be checked for accuracy and quality before being posted to the broader group, so the Wetland Education Network could be considered a trusted information source.

Workshop participants were keen to engage in a Wetland Education Network and anxious to see what next steps emerge.

A detailed synopsis report of the workshop is available through AB NAWMP.

## 4.0 Going Forward

Given the success of the Wetland Education Network pilot and the level of engagement that has occurred across various sectors, there is currently momentum behind the concept of a Wetland Education Network that can be acted upon. As per the discussions by Wetland Education Network pilot Action Group members and participants of the Wetland Education Network workshop, the following considerations could be made if a Wetland Education Network is pursued:

- Creation of a business plan including how the network and a Coordinator could be funded long-term;
- Hire a dedicated Wetland Education Network Coordinator;
- Create Terms of Reference for the Action Groups with clear processes and outcome expectations;
- Populate the Action Groups in a way that is transparent and seen as representative of sectors across the province engaged in wetland education and outreach;
- Have Action Groups meet and begin to identify necessary wetland education resources and work to develop those resources;
- Ensure Action Group work is communicated horizontally to other Action Groups and to the broader network; and
- Organize a Wetland Education Network workshop for 2018.

The Wetland Education Network pilot has created a foundation for many of the above recommendations.

#### 6.0 Conclusion

The AB NAWMP Partnership recognized the need for coordinated wetland education in Alberta and has put steps in place to create a Wetland Education Network. There has been broad based support for a Wetland Education Network since the Wetland Education and Outreach Working Group brought conceptual ideas to a larger stakeholder base. AB NAWMP chose to build on the support by funding the Wetland Education Network Pilot, and this has also been supported by enthusiastic individuals across various sector groups.

There is currently momentum around working collaboratively on the topic of wetland education and outreach, and the recommendations put forward by the Wetland Education and Outreach Working Group, the Wetland Education Network pilot Action Group members and the participants of the Wetland Education Network workshop give a solid foundation for this initiative to move forward.

#### 7.0 References

AB NAWMP Wetland Education and Outreach Working Group. 2016. Draft Recommendations to Improve Wetlands Literacy in Alberta via a Wetland Education and Outreach Collaborative Framework.

## Appendix A

**Wetland Education Network Pilot** 

**Terms of Reference for Action Groups** 



#### **Terms of Reference**

### Identifying Wetland Education and Outreach Needs in Alberta September 2016

#### Background

The province of Alberta has experienced a great deal of wetland loss. In order to address the loss of valuable wetland resources, the Government of Alberta created the Wetland Policy, focused primarily on regulatory means to accomplish the goal to "conserve, restore, protect and manage Alberta's wetlands to sustain the benefits they provide to the environment, society and the economy". However non-regulatory tools such as wetland education and outreach are equally important in order to increase knowledge around the benefits wetlands provide and to engage stakeholders in wetland stewardship practices.

There are numerous wetland educators throughout Alberta, however education and outreach efforts have been occurring in a non-coordinated fashion. The Alberta North American Waterfowl Management Plan (NAWMP) Partnership has recognized the value of having wetland educators work collaboratively and created a Wetland Education and Outreach Working Group to design a conceptual framework for a collaborative wetland education and outreach program, which was approved to move forward by a larger stakeholder group in a March 2016 forum.

This framework includes a comprehensive Wetland Education Network that will meet annually as well as targeted sector working groups (hereby referred to as Action Groups) to identify wetland education needs, tools and products to improve wetland education and outreach efforts in Alberta.

#### **Project description**

In order to proceed with the Wetland Education Network Framework, a Wetland Education Network Coordinator has been brought in to facilitate the formation of sector Action Groups. These Action Groups are as follows:

- Agriculture Action Group
- Industry Action Group
- Municipal Action Group

Public and Education Action Group

Members of the Action Groups will be chosen based on their ability to speak to their sector's current level of wetland knowledge, identify sector wetland education and outreach needs, and potentially identify tools and delivery mechanisms to work collaboratively with other members of their sector.

The current pilot project will include two meetings per Action Group:

#### Meeting 1 (October 2016):

- Initial introductions
- Finalize terms of reference
- Compile list of existing wetland education and outreach programs in the sector
- Determine the sector's current level of wetland knowledge

#### Meeting 2 (late October-late November 2016):

- Classify the sector's level of wetland knowledge and current ability for stewardship action
- Identify a list of organizations that would be important to include in the Wetland Education Network
- Compile an initial list of ideas for products and tools that could lead to moving forward with messaging and education in a collaborative way

The summaries produced by the Wetland Education Coordinator from the information collected at these meetings will help inform the future direction of the Wetland Education Network.

Meetings will be 3 hours in length and will be held at a venue as central as possible to the majority of the Action Group members. This will be Leduc, Alberta if there are members from across the province. Meetings dates have not been set in advance, polling for dates that would make it possible for the most members to attend will be done as soon as Action Groups have been populated (by end of September 2016).

**Contact and Administrator** (on behalf of the Alberta NAWMP Partnership)

Terra Simieritsch
Wetland Education Network Coordinator
t\_simieritsch@liliumconsulting.org
403-512-4300