



# Strategic Action - 2020

**An Executive Summary of 2020 Priorities for the  
Pigeon Lake Watershed Association and Implementation of  
the Pigeon Lake Watershed Management Plan**



## **1.0 Introduction**

The purpose of the document is to summarize 2020 implementation priorities for the Pigeon Lake Watershed Management Plan (the Plan). The document provides a reference point for evaluating program results and for communicating priorities and accomplishments to supporters, stakeholders and the general community. Programming funding sources come primarily from municipalities, donors and grants as outlined. Municipal financial support of the PLWA and its Executive Director is critical for the Plan components to move forward.

This summary was produced in light of the COVID-19 medical crisis and the Pigeon Lake Watershed Association's revised program plan to proceed with action on the Pigeon Lake Watershed Management Plan and the components under the purview of the PLWA. Programming in 2020 focuses building a strong online repository of up-to-date stewardship materials, social marketing through social media, regular touchpoints with PLWA membership, and web enabled meetings for working groups and committees.

## **2.0 Role and Relationships in Moving Forward Plan Recommendations**

The Pigeon Lake Watershed Management Plan has seven major objectives and 49 actionable recommendations. Municipalities, Senior Government, the PLWA and the Steering Committee for the Plan have assigned roles in implementation of the Plan. The PLWA, Steering Committee, and municipal roles are important to note:

- **PLWMP Steering Committee:** multi-stakeholder representation by the PLWA, municipalities, Alberta Environment and Parks, Healthy Lake Partners, Chamber of Commerce and Maskwachis Cree. The committee reports to the Alliance of Pigeon Lake Municipalities and PLWA Board of Directors. Committee costs are underwritten by the PLWA and much of the day to day committee work is undertaken by the PLWA Executive Director. With respect to Plan implementation, the Steering committee is responsible for:
  - Directing technical recommendations e.g. Municipal Drainage Guide, Land Use Bylaw Guide
  - Advocating for science and monitoring to address knowledge gaps
  - Vetting, commenting, and monitoring outcomes including Stewardship Action Plan components by the PLWA
  - Reporting to the APLM and PLWA Boards
- **Pigeon Lake Watershed Association:** the PLWA and its Executive Director have several roles relative to the implementation of the Plan, some of which include:
  - Implementing the community action, stewardship components of the Plan
  - Providing leadership and resources (including sourcing funds)
  - Maintaining a network of experts, healthy-lake champions, and volunteers

- Managing programming to support Steering Committee, working groups and the Science Committee.
- Fund Development and grant writing to support specific Plan components.
- Provide supporting resources and delivery for components of the Plan funded by the ACP Grant
- **Municipalities and the Alliance of Pigeon Lake Municipalities:** Responsibilities of municipalities relative to the PLWMP include:
  - Considering Plan recommendations and subsequent guidance documents in the development of Statutory Plans (IDP, MDP and Land Use Bylaws and policies) and in municipal operations.
  - Assessing technical options for in lake interventions
  - Working together with and support for the PLWA and PLWM Steering Committee in moving forward with Plan Implementation.

Implementation of the plan will take several years and significant fiscal resources. Municipal Support of the PLWA in its roles will be essential in moving the plan forward.

### **3.0 Vision Statement**

*Improved watershed natural environment and water quality*

### **4.0 Mission Statement**

*To initiate and promote action-oriented watershed policies and best practices that support the long-term health, protection and restoration of the watershed.*

### **5.0 Priorities**

The following tables provide a succinct “snap-shot” of the current work priorities of both the PLWA and the PLWMP, the anticipated outcomes and the budget and funding source.

Priorities have been determined in each of the four key areas of the Plan (Pigeon Lake, Shoreline, Watershed Lands, and Working Together) These key areas are structured based on Plan objectives i.e., where we want to go; Recommendations and actions i.e. how we will get there based on three categories: 1) Policy: Statutory plans, bylaws, agreements, 2) Technical: Science and monitoring, 3) Community Action: Advocacy, education, and voluntary action. Responsible parties, time frame and measures of success are identified for each recommendation and action.

#### **Lead Roles / 49 Recommendations**

The PLWA has taken leadership and resource roles in moving forward the technical phases of work for the PLWMP steering committee and the municipalities.

## Priorities in 2020

### 5.1 Community Action Advocacy & Education

Plan Total: 19 Community Action Advocacy & Education Recommendations,

Lead Role: PLWA (15), PLWMP (1), Municipal (2), County (1)

Programs: PLWA / PLWMP

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<p><b>Welcome to the Lake Program</b> (May 2020-June 2021) For: Realtors, home buyers, new home owners</p> <ul style="list-style-type: none"> <li>• Stewardship Working Group with real estate professionals and local leaders</li> <li>• New Stewardship Welcome Package for Realtors to provide clients (new home owners in the watershed)</li> <li>• Stewardship training for Realtors: Workshop (in person), Webinar and Podcast</li> <li>• Healthy-Lake practices social marketing campaign to train and connect with Realtor through social media</li> <li>• Web-based portal for Real Estate Professionals w/ links from the Central Alberta Real Estate Association and other local Associations</li> </ul>	<p><b>8</b> Improve regional collaboration, partnerships and organizational effectiveness to promote collective action for a healthy watershed, healthy lake and healthy community.</p> <p><b>8f</b> Incentives to Promote Voluntary Action: Develop non-monetary and monetary incentive programs to promote voluntary action for individuals, municipalities and organizations.</p>	<p>PLWA Alberta Real Estate Foundation Grant</p>

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<p><b>Shoreline Landscape Development Guidelines</b> (Summer 2020) For: Shoreline Land Owners</p> <ul style="list-style-type: none"> <li>Guidelines in a print ready digital file (PDF) for posting on PLWA Website</li> <li>Web-based (i.e. HTML) version of the Guidelines for PLWA site and searchable online summary for integration across each of the municipal websites.</li> <li>Communications to engage residents, landscapers, realtors and other stakeholders</li> </ul>	<p><b>5e</b> Shoreline Practices and Restoration: Provide guidance documents, incentive programs, technical information, and support to shoreline landowners to implement healthy shoreline practices, shoreline restoration, and lake-friendly landscaping.</p> <p><b>5d</b> Lake Shoreline Property Management Guidelines</p> <p><b>2b</b> Lawn Fertilizers and Pesticides</p> <p><b>2c</b> Watershed Stewardship Advocacy &amp; Education</p>	<p>Alberta Community Partnership (ACP) Grant, Administrator SV Grandview / PLWA</p>
<p><b>Community Action Stewardship Campaign Tool Box</b> (Fall 2019 / Spring 2020)</p> <ul style="list-style-type: none"> <li>Branded, messaging templates for PLWMP community action stewardship resources for print, signage, and social media assets</li> <li><i>Did you know...</i> information sheets on primary watershed topics e.g. Water quality and level, benefits of trees are under consideration as information from current research findings as available.</li> <li>Optimized web access to community action materials including integrated PLWA/PLWMP website and linking from Municipal websites to PLWMP community action materials</li> </ul>	<p><b>2c</b> Watershed Stewardship Advocacy &amp; Education Encourage landowners (residential, business, recreational and agricultural) to adopt proactive lake-friendly environmental management practices, landscaping and activities. Support land use policies and regulatory measures with public awareness and education.</p>	
<p><b>9<sup>th</sup> Annual Leaders Session</b> (Postponed as Covid-19 prevention measure)</p> <ul style="list-style-type: none"> <li>Information and collaboration session for community leaders</li> </ul>	<p><b>8</b> Improve regional collaboration, partnerships and organizational effectiveness to promote collective action for a healthy watershed, healthy lake and healthy community.</p>	

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<p><b>Mulhurst Revitalization Project</b> (April 2020 - April 2022)</p> <ul style="list-style-type: none"> <li>• Park, parking and drainage enhancement</li> <li>• Community lake smart demonstration garden &amp; stewardship</li> <li>• Nutrient runoff analysis and citizen monitoring</li> </ul>	<p><b>3c</b> Clean Runoff: Promote clean runoff practices on private and public properties as per the Alberta Clean Runoff Action Guide</p> <p><b>2c</b> Watershed Stewardship Advocacy &amp; Education</p> <p><b>2f</b> Recreational land uses</p>	<p>PLWA</p> <p>County of Wetaskiwin</p> <p>PLWA Sourced Potential Raingarden Grant tbd (planting defer to 2021, COVID)</p>
<p><b>Stewardship Programming Materials</b></p> <ul style="list-style-type: none"> <li>• Brochures, farmers market activities and stewardship materials</li> </ul>	<p><b>2c</b> Watershed Stewardship Advocacy &amp; Education</p>	<p>PLWA</p> <p>Tweed Grant funding pending</p>
<p><b>Stewardship Events for Visitors &amp; Residents</b> (ongoing)</p> <p>Focus in 2020 on building online repository</p> <ul style="list-style-type: none"> <li>• Stewardship Programming for children and youth Topics: Birds, Biodiversity, Watershed 101, conservation, water cycle, water quality (July &amp; August)</li> <li>• Love the Lake Family Fun Day (Adaptation – promote online programming activities for visitors, campers)</li> <li>• Great Canadian Shoreline Clean Up - October</li> </ul>	<p><b>2c</b> Watershed Stewardship Advocacy &amp; Education</p>	<p>PLWA</p>
<p><b>PLWA AGM &amp; Open house</b> (July 25, 2020)</p> <p>For: 1300 PLWA Members</p> <ul style="list-style-type: none"> <li>• Business Meeting (Adaptation as Web conference)</li> </ul>	<p><b>2c</b> Watershed Stewardship Advocacy &amp; Education</p>	<p>PLWA</p>

<ul style="list-style-type: none"> <li>Open house (Adaption for residents as online coffee conversations with healthy-lake experts in July)</li> </ul>		
<b>Program / Outcome / Timeline</b>	<b>Actioning the Plan Recommendations</b>	<b>Finance</b>
<p><b>Farming for Tomorrow Information Night for Local Producers</b> (April 2) Adaption: recorded sessions with experts on conservation programs.</p> <ul style="list-style-type: none"> <li>Partnered with ALUS Leduc &amp; Wetaskiwin, Wizard Lake Watershed Association, Alberta Conservation Association, Cows and Fish, Alberta Riparian Specialist, Alberta Environment &amp; Parks</li> </ul>	<p><b>2d</b> Existing Agricultural Operations: Encourage agricultural operators to adopt beneficial management practices that reduce nutrient runoff. Promote agricultural erosion and sediment control practices (e.g. low tillage). <b>1d</b> Restoration: Using incentives such as the Alternative Land Use Services Program (alus.ca)</p>	PLWA
<p><b>Invasive Species Prevention Program</b> (Ongoing)</p> <ul style="list-style-type: none"> <li>Invasive Species Awareness Week – Social Marketing through social media, building awareness and expert network (February 24-28)</li> <li>Clean, Drain, Dry Boater Awareness Program -Survey boaters entering the lake and Radio PSA</li> <li>Invasive Species Awareness and Community Weeding- staff and community help to weed demonstration gardens &amp; online resources</li> <li>Promoting Native Plants – Native Plant Sales, online resources about native plants</li> </ul>	<p><b>7a</b> Invasive Species: Complement the Government of Alberta’s province-wide efforts with local initiatives to improve education and build local defenses to keep out aquatic invasive species. Measures include monitoring, public education, signage, and other initiatives <b>5g</b> Noxious Weeds: Continue invasive species eradication programs, including education, monitoring, and eradication of prohibited noxious weeds</p>	PLWA
<b>Watercraft inspection Station, Advocacy Letter</b> (Spring 2020)		PLWA

## 5.2 Policy Statutory Plans & Bylaws

Total: 22 Policy Statutory Plans & Bylaws Recommendations being advanced in 2020

Lead Roles: Municipal (15) PLWMP (5) Summer Villages (1) Government of Alberta (1)

Programs: PLWA / PLWMP

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<p><b>Residential Construction Checklist (Fall 2020)</b>            Primary Audience: Development Officer            Secondary Audience: Landowner &amp; Contractors</p> <ul style="list-style-type: none"> <li>Checklist for best management practice in all phases of construction to protect the health of the lake e.g. sediment control based on model land use bylaw, clean runoff, shoreline protection and naturalization, etc. Working Group: Don Davidson, Mayor, Grandview; Bob Gibbs, Chair, PLWMP; Randal Kay, Mayor, Golden Days; Ron LaJeunesse, Deputy Mayor, Crystal Springs, Catherine Peirce, Executive Director, PLWA</li> </ul>	<p><b>5d</b> Lake Shoreline Property Management Guidelines            Develop a checklist and reference guide to assist development officers and lot owners in addressing the special development requirements for shore line lots. (e.g. On the Living Edge Update).  <b>3c</b> Clean Runoff</p>	<p>PLWA             ACP – tbd            (allocated under Municipal operations)</p>
<p><b>Mamawo Committee</b>            Lead: Maskwacis Four Nations (PLWA admin support)</p> <ul style="list-style-type: none"> <li>Recommendations for First Nations Stewardship and Engagement</li> </ul>	<p><b>8c.</b> First Nations: Engage the First Nations of IR 138A Pigeon Lake Reserve in the Watershed Management Plan.</p>	<p>(ACP) Grant,            Administrator            SV Grandview /            PLWA</p>
<p><b>Watershed Regulations, Land Use Bylaws (ongoing)</b>            Lead: Municipal Planning Services (PLWA admin support)</p> <ul style="list-style-type: none"> <li>Step I Discussion Guide (Winter 2020)</li> <li>Step II Municipal Workshop (May 29, 2020, Tbd)</li> <li>Step III Individual Municipal Guidelines (Fall 2020)</li> </ul>	<p><b>1b, 1c, 2a, 2e, 3b, 3c, 4a, 4b, 5a, 5b, 8a, 8b</b></p>	<p>(ACP) Grant,            Administrator            SV Grandview /            PLWA</p>



**5.2a Policy Statutory Plans & Bylaws, continued** (Note: Gray boxes denote municipal initiatives but have been included to show the breadth of the implementation work in 2020)

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<b>Municipal Development Plans</b> Lead: Municipal	<b>8b.</b> Municipal Development Plans: Work toward consistent municipal development plans for all Summer Villages, that incorporate the environmental protection policies of the Watershed Management Plan and the Model Land Use Bylaw <b>1b, 1c, 2a, 2e, 3b, 3c, 4a, 4b, 5a, 5b, 8a</b>	Municipal
<b>Intermunicipal Development Plans</b> Lead: Municipal	<b>8a.</b> Statutory Regional Plans: Work toward a watershed-wide Intermunicipal Development Plan (IDP), Regional Collaboration Framework and a sub-regional plan under the North Saskatchewan Regional Plan that all align with the Pigeon Lake Watershed Management Plan. Measures of the Pigeon Lake Watershed Plan 2000 not addressed in the 2018 version will remain in effect until addressed in statutory Plan updates. <b>1b, 1c, 2a, 2e, 3b, 3c, 4a, 4b, 5a, 5b, 8a</b>	Municipal
<b>LUB Implementation 2021</b>	<b>1b, 1c, 2a, 2e, 3b, 3c, 4a, 4b, 5a, 5b, 8a, 8b</b>	Municipal

### 5.3 Science & Technical

Total: 8 Science & Technical Recommendations

Lead Roles: PLWMP (6) Municipal (1) Government of Alberta (1)

Programs: PLWA / PLWMP

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
<p><b>Stormwater Drainage Guide</b> (Fall 2020) Lead: Alberta Low Impact Development Partnership (PLWA admin support)</p>	<p><b>3f</b> Water Quality Guideline Develop a drainage water quality guide with quality and release rates guidelines for new major developments and proposed retrofits for existing drainage systems. Phosphorus is to be recognized as the water quality parameter of greatest concern for Pigeon Lake.</p>	<p>(ACP) Grant, Administrator SV Grandview / PLWA</p>
<p><b>LakeWatch</b> (Summer/Fall 2020)</p> <ul style="list-style-type: none"> <li>• Water quality monitoring, ALMS Lead</li> <li>• Citizen Science Mussel Monitoring, PLWA Lead</li> </ul>	<p><b>6a</b> Advancement of Science: Identify knowledge gaps relating to the formation of cyanobacteria blooms and techniques for meaningful reductions. Prioritize specific investigations and research projects. Source funds and implement ongoing research for Pigeon Lake.</p>	<p>(ACP) Grant, Administrator SV Grandview / PLWA</p>
<p><b>Nutrient Loading</b> (ongoing)</p> <ul style="list-style-type: none"> <li>• Preliminary assessment of water quality in culverts and ditches during in spring runoff (may test the same areas during major rain events in the summer as well)</li> </ul>	<p><b>6a</b> Advancement of Science</p>	<p>(ACP) Grant, Administrator SV Grandview / PLWA</p>
<p><b>Science Committee</b> (ongoing)</p> <ul style="list-style-type: none"> <li>• Investigating enhanced water quality monitoring including the use of satellite imagery. Committee: Dr. Rolf Vinebrooke, University of Alberta; Evan DeLancey, University of Alberta; Arin McFarlane-Dyer, AEP; Brad Peter, ALMS; Don Davidson, Grandview Mayor; Catherine Peirce, PLWA; Bob Gibbs, PLWMP</li> </ul>	<p><b>6a</b> Advancement of Science</p>	<p>(ACP) Grant, Administrator SV Grandview / PLWA</p>

### 5.3 Science & Technical, Continued

(Note: Gray boxes denote municipal initiatives but have been included to show the breadth of the implementation work in 2020)

Program / Outcome / Timeline	Actioning the Plan Recommendations	Finance
In Lake Management	<p><b>7b</b> In-Lake Management: Evaluate potential management options including project description, costs and financing; effectiveness in reducing phosphorus and algal blooms; reapplication frequency; environmental, social, and economic risks; and regulatory concerns. Implement where feasible.</p> <p><b>6a</b> Advancement of Science</p>	(ASP) Crystal Springs