



ACTION PLAN

WABAMUN LAKE SUB-WATERSHED LAND USE PLAN

Planning & Development Services

November 2016

Wabamun Lake Subwatershed Land Use Plan - Action Plan

Introduction:

The Wabamun Lake Sub-Watershed Land Use Plan was started in response to increased land use pressures on Wabamun Lake. Using a Regional Collaboration Grant, the Plan was developed with the following partners:

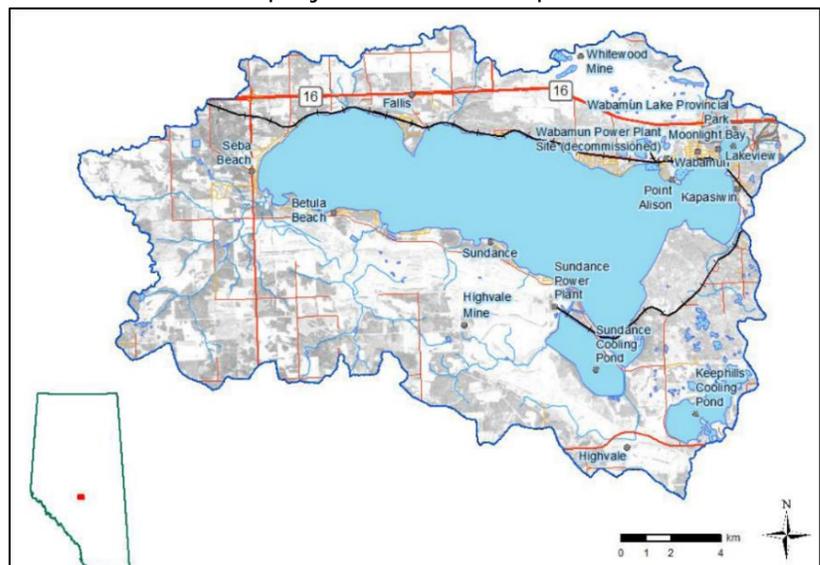
- the villages of Spring Lake and Wabamun
- the summer villages of Seba Beach, Lakeview, Betula Beach, Point Allison, Kapasiwin
- the Government of Alberta (GOA)
- the Wabamun Watershed Management Council (WMMC)
- the North Saskatchewan Watershed Alliance (NSWA)

The Sub-Watershed Plan will result in recommendations to support future protection of the lake.

The project steering committee, stakeholders, and public reviewed the Sub-Watershed Plan and identified the key projects that would help support a healthy sub-watershed. This Action Plan identifies those projects and actions.

Recommended Action Plan projects are classified by project name and purpose. These projects have further been detailed by identifying lead / secondary organizations, and potential staff and financial resources. The Action Plan is **for estimation purposes only and does not commit the County to complete or fund any project.** Individual projects will need to be further prioritized and refined in regards to resource requirements. Prioritized projects will be incorporated in future budgeting processes.

Success of the Sub-Watershed Plan requires an **integrated approach** where stakeholders work together. The Action Plan identifies the potential areas for partnerships (CO-LED projects) that, when acted on together can contribute to the health of Lake Wabamun and the sub-watershed area in the future.



Wabamun Sub-Watershed (Parkland County, 2016)

Wabamun Lake Subwatershed Land Use Plan Recommendations

Plan recommendations are categorized into two groups:

- *ONGOING AND SUPPORTING PROJECTS: these are County projects that are ongoing or recently completed that support the future protection of the Wabamun Lake Watershed.*
- *ACTION PLAN TABLE - new projects: these are new projects identified for completion in the Action Plan.*

ONGOING AND SUPPORTING PROJECTS

ACTION:	PROJECT STATUS:
Pursue Wetlands Restoration Agency designation	✓ Completed Wetland and Historical loss inventory supports development of the Wetland Restoration Agency.
Establish Wabamun Watershed Committee to implement plan findings	<p>✓ A CAO Committee has been developed and is the first step in developing an Implementation Committee. CAO Committee to address issues including boat launch areas and nutrient loading in the sub-watershed.</p> <p>✓ Alberta Environment and Parks has developed a TOR and, with the North Saskatchewan Watershed Alliance commenced an Integrated Watershed Management Plan for the sub-watershed.</p>
Expand the education and communication program for the watershed	<p>✓ Parkland County Community Sustainability is undertaking a pilot shoreline restoration project to draw attention to restoration opportunities.</p> <p>✓ Parkland County's Alternative Land Use Service (ALUS) and Green Acreages program is an element of the education and communication program.</p> <p>✓ Interactive Guide to Waterfront Living program has an online workshop including videos and quizzes. Used to educate waterfront users on shorelines and waterbodies.</p> <p>✓ An environmental education and Engagement strategy program has been developed to deliver targeted environmental education programs to resident's throughout the County to identify current gaps in environmental literacy and programs.</p>

	<p>√ Love Your Lake: A program implemented by Nature Alberta to assess shoreline properties along Wabamun by water and inform residents on their shoreline health.</p> <p>√ Living By Water: A program implemented by Nature Alberta to complete one-on-one property assessments for residents living along waterbodies and provide personalised recommendations on how to improve the health of their properties.</p>
Enhance Phase 4 – Lake Toolkit for the Wabamun Sub-Watershed Land Use Plan	√ A draft Lake Toolkit is currently being finalized by Administration.
Re-designate old municipal and environmental reserve parcels, educate and enforce uses on these parcels.	√ Enforcement Services has developed a program for Hubbles Lake that focuses on inventorying and educating residents on appropriate uses for MR and ER. This program can be expanded for Lake Wabamun.
Develop septic program for the Watershed	<p>√ The County’s Green Acreages program has funding available to assist with septic system repair / replacement for eligible projects.</p> <p>√ Safety Codes service area has 2 Safety Officers with private septic certification working able to inspect private septic systems within the watershed.</p> <p>√ P&D Safety Codes have undertaken some preliminary work in preparing a private septic “checklist” to assist in the development of a future septic program.</p>
Update the County Municipal Development Plan	<p>√ Work on a new County MDP is underway and will be completed by 2017.</p> <p>√ Prior work on the Environmental Conservation Master Plan (BMPs) will be incorporated into the MDP update.</p>
Update the County Land Use Bylaw	√ The project work plan for updating the County LUB has recently been approved by Council in fall 2016.
Assist in the construction of future boat access points, launches and parking lots.	√ A Wabamun CAO Committee (ad-hoc) has been developed to discuss issues including boat launches and nutrient loading in the sub-watershed area.
Assist in providing resources for boat washing facilities	√ Alberta Environment and Parks is assisting local CAOs in identifying boat launch areas(s) for Wabamun Lake and is also advocating for boat washing facilities.

ACTION PLAN TABLE - new projects

New projects have been identified through a comprehensive review of the Sub-Watershed Land Use Plan. Potential projects (ACTIONS) have been identified by the "lead" organization, as well as the overall purpose of the action.

Resources, staff hours, and capital and operational costs are for estimating purposes only. This ACTION PLAN in no way commits the County to complete any of these projects, or assign staff or financial resources to projects. *Individual projects, once confirmed by the County will be further detailed out and, where appropriate resources identified.*

Draft Wabamun Lake Sub-Watershed Land Use Plan Action Plan *(for estimate purposes only)*

Project #	Project/Activity Name	Project/Activity Purpose and Description	Project/Action Lead	Resources needed (County)	Start (Month-Year)	Completion (Month-Year)	Time Allocation (Hours)	Capital Cost Estimate	Operating Cost Estimate	Total Cost Estimate	Prioritization 1: Mission Critical 2: Required 3: If Time Permits	Status 1: Green; 2: Amber 3: Red	Next Action (If Applicable)
NOTE: Projects listed below may be co-led by several departments at once. INTEGRATED projects that are co-led are identified as "CO-LED PROJECT" in the Project / Action Lead column.													
PLANNING AND DEVELOPMENT SERVICES													
1	Refine and finalize the Phase 4 - Lake Toolkit: Wabamun Sub-Watershed Land Use Plan	Completion of the Lake Toolkit to assist lake organizations to complete future Sub-Watershed Land Use Plan.	Lead: P&D Second: Parks and Rec	1. Planner 2. Spvr, Long Range Planning 3. Spvr, Parks and Recreation	Dec-16	Feb-17	150	0.00	11,700.00	11,700.00	2	1	
2	Re-designate old municipal and environmental reserve parcels, educate and enforce uses.	Complete a proper inventory of all County parcels and re-designate parcels into a proper designations as needed. Begin an education and enforcement program for uses on Municipal Reserve (MR) and Environmental Reserve (ER) parcels.	Lead: P&D Second: Parks and Rec GIS Community Sustainability Bylaw Services	1. Planner 2. Spvr, Long Range Planning 3. Spvr, Current Planning 3. Spvr, Parks and Recreation 4. GIS Technologist II 5. Spvr, Community Sustainability 6. Community Peace Officer II	Jun-17	Dec-18	750	0.00	58,500.00	58,500.00	2	2	
3	Complete Hazard Land Analysis for the Sub-Watershed	Analysis would define, investigate and recommend where hazardous areas are located and recommend protection options.	Lead: P&D Second: Engineering Services	1. Planner 2. Engineering Coordinator	Sep-19	Nov-20	420	160,000.00	32,760.00	192,760.00	3	3	
4	Update the Municipal Development Plan	Municipal Development Plan (MDP) updates would focus on potentially incorporating Best Management Practices (BMP's) around lake areas, and identifying potential overlay areas.	Lead: P&D Second: Ag Services Community Economic Development	1. Planner 2. Spvr, Current Planning 4. Spvr, Ag Services (operations) 5. Economic Dev Officer – Rural 6. GIS Tech II	Jan-17	Dec-17	375	75,000.00	29,250.00	104,250.00	1	2	
5	Prepare County Land Use Bylaw Changes	Land Use Bylaw (LUB) changes to review Confined Feeding Operations (CFO) requirements and review sediment runoff, recharge areas, and setback regulations for future site planning.	Lead: P&D Second: Community and Protective (Parks and Rec)	1. Development Planner 2. Spvr, Development Services 3. Spvr, Parks and Open Space	Jan-17	Dec-19	1050	17,000.00	81,900.00	98,900.00	2	2	
6	Explore Inter-Municipal Area Structure Plan (joint project with watershed municipalities) **dates may be expedited due to MGA review**	To and align initiatives between Parkland County and municipalities within the watershed.	Lead: P&D Other Municipalities	1. Planner 2. Spvr, Long Range Planning 3. Spvr, Current Planning	Jan-19	Oct-20	350	130,000.00	27,300.00	157,300.00	3	3	

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7	Develop a septic program for the watershed	Septic program would include inspection, education and rehabilitation components to assist residents with the repair of septic systems. The program can be expanded in the future to include a monitoring and on-going enforcement component.	CO-LED PROJECT P&D Safety Codes Community Sustainability Bylaw Services Other Municipalities	1. Planner 2. Spvr, Safety Codes 3. SCO (Private Septic) 4. Spvr, Community Sustainability 5. Community Peace Officer II 6. GIS Tech II	Dec-17	Sep-19	2475	95,000.00	193,050.00	288,050.00	2	2	
8	Transfer of Development Credit Program	Establish a Transfer of Development Credits (TDC) Pilot Project to direct County Residential (CR) development to most suitable locations and protect sensitive lands. Roll into TDC project identified in Future of Agriculture Action Plan.	CO-LED PROJECT P&D Agriculture Services Community Sustainability Communications	1. Planner 2. Spvr, Long Range 3. Spvr, Current Planning 4. Spvr, Ag Services (operations) 5. Spvr, Community Sustainability 6. Communications Coordinator	Dec-17	Nov-19	525	200,000.00	40,950.00	240,950.00	2	3	
9	Complete a residential carrying capacity study for the Sub-Watershed	The Study would evaluate the carrying capacity of the Watershed for future residential development capacity.	CO-LED PROJECT P&D Ag Services Community Sustainability Other Municipalities	1. Planner 2. Spvr, Long Range 3. Spvr, Community Sustainability	Aug-20	Dec-21	490	210,000.00	38,220.00	248,220.00	3	3	
COMMUNITY SUSTAINABILITY													
10	Pursue Wetland Restoration Agency designation	Develop a framework for accessing the Province's Wetland Restoration Fund	Lead: Community Sustainability Second: P&D	1. Spvr, Community Sustainability 2. Biologist 3. Spvr, Long-Range Planning	Oct-16	Dec-17	230	25,000.00	17,940.00	42,940.00	1	2	Implementation
11	Expand the education and communication program for the watershed	Survey resident environmental literacy and develop a targeted engagement strategy address current gaps. Will be an extension of the Environmental Education and Engagement Strategy.	Lead: Community Sustainability Second: Communications	1. Environment Engagement Advisor 2. Communications Coordinator	Dec-16	Jul-17	600	40,000.00	50,000.00	90,000.00	2	2	Implementation
12	Establish Wabamun Watershed Implementation Committee	Recruit representatives to sit on the committee. Organise meetings as necessary to ensure plan implementation.	Lead: Community Sustainability Second: P&D	1. Spvr, Community Sustainability 2. Planner	Jan-17	Dec-20	70	0.00	14,000.00	14,000.00	2	3	
13	Complete Habitat Connectivity Study	Conduct an animal/bird/invertebrate connectivity study of the Sub-Watershed area to determine inventory, habitat location and movement patterns.	Lead: Community Sustainability Second: P&D	1. Spvr, Community Sustainability 2. Biologist 3. Planner	Jan-18	Dec-19	490	150,000.00	0.00	150,000.00	3	3	Develop a management plan
14	Pursue Lake Friendly Aquavist Certification for Watershed	Implement, manage and record all initiatives within the Sub-Watershed and	Lead: Community Sustainability Parks and Rec	1. Spvr, Community Sustainability 2. Planner	Jan-17	Dec-20	656	100,000.00	10,000.00	110,000.00	3	3	Increase level of certification

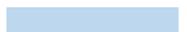
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		report this information to attain the Lake Friendly Aquavist certification.	P&D	3. Community Development Officer									
AGRICULTURAL SERVICES													
15	Improve and communicate Plan findings and potential impacts to farming community	Create and distribute a mail out regarding the impacts of the Wabamun Plan on the farming community	Lead: Ag Services Second: Communications, I.T.	1. Manager Ag Services 2. Spvr of Operations 3. Spvr of Agronomics 4. Communications staff member 5. I.T. staff member	Jun-17	Dec-18	100	10,000.00	7,800.00	17,800.00	2	2	
ENGINEERING SERVICES													
16	Alignment of engineering documents to Sub-Watershed Plan findings	A start and end date can't be assigned as this is an ongoing activity not a defined project	Lead: Engineering Services	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	0	
17	Explore the development of Best Management Practices (BMP) for future road construction and sediment control	A start and end date can't be assigned as this is an ongoing activity not a defined project	Lead: Engineering Services	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	0	
18	Complete Stormwater Management Study for the Sub-Watershed	Develop an overall storm water management basin report. Identify existing facilities and storm drain patterns. Identify capital improvements to manage growth and development within the region	Lead: Engineering Services Second: Staff Biologist	0.25 FTE (temporary - 1 year) PLUS consultant team to complete assignment	Jan-19	Dec-19	1000	300,000.00	100,000.00	400,000.00	3	3	
19	Assist in the construction of future boat access points, launches and parking lots	A start and end date can't be assigned as this is an ongoing activity not a defined project	Lead: Engineering Services Second: Community and Protective (Parks and Rec) Other Municipalities Alberta Environment and Parks	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	0	
20	Review Engineering Standards to ensure alignment with Sub-Watershed Land Use Plan	A start and end date can't be assigned as this is an ongoing activity not a defined project	Lead: Engineering Services Second: Planning and Development	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	0	
COMMUNITY ECONOMIC DEVELOPMENT													
21	Develop incentives to promote infill, economic diversification and best	TBD	Lead: Community Economic Development	1. Economic Development Officer 2. Planner	Jan-19	Jul-19	80	0.00	6,240.00	6,240.00	2	3	

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	management practices and opportunities in the Sub-Watershed												
COMMUNITY AND PROTECTIVE SERVICES													
22	Designate Parkland County Peace Officer to educate and enforce regulations within the Sub-Watershed	Designated Peace Officers will be designated specifically to the Sub-Watershed. Intention is to educate residents and visitors around the bylaws and expectations of land use in this area and enforce as required.	Lead: Community and Protective Services	1. Spvr, Enforcement Services 2. Spvr, Current Planning 3. Peace Officer II (2 Seasonal), Vehicle	May-17	Sep-18	800	15,000.00	220,000.00	235,000.00	2	2	
PARKS, RECREATION, AND CULTURE													
23	Align Recreation, Parks, and Open Space Master Plan to Sub-Watershed Plan findings	To be determined following the Parks, Recreation and Culture Master Plan and Park Improvement Plan Phase 2 plans are completed. Implementation plan needs to be developed	Lead: Parks, Recreation and Culture	TBD following the Parks, Recreation and Culture Master Plan and Park Improvement Plan Phase 2 plans are completed. Implementation plan needs to be developed.	TBD	TBD	TBD	TBD	TBD	TBD	2	2	
CORPORATE SERVICES (COMMUNICATIONS)													
24	Develop multi-stakeholder public communications program with focus on education / information sharing to provide awareness of the sub-watershed	Coordinate with stakeholders and County departments to develop a communications strategy to inform the public about the watershed and watershed projects underway. Campaign targets: 1. residents / acreage owners 2. youth and local schools 3. businesses and entrepreneurs 4. Stewardship groups	CO-LED PROJECT County departments: (Communications, P&D, Parks, Recreation and Culture, Community Sustainability, GIS, Bylaw Services) AB Environment and Parks NSWA Various lake stewardship groups	1. Communications Coordinator 2. Communications Assistant 3. Alberta Environment and Parks 4. NSWA 5. lake stewardship groups	Jan-17	On Going	140	5,000.00	10,920.00	15,920.00	2	3	
INFORMATION SERVICES													
25	GIS mapping on various projects, studies and educational material	To help internal departments to create maps for education and project studies, as well as to assist consultants with data and mapping.	CO-LED PROJECT Communications P&D Parks and Rec GIS Community Sustainability Bylaw Services	1. GIS Technician I & II 2. GIS Analyst	Jan-17	Jan-18	200	0.00	15,600.00	15,600.00	1	1	

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OTHER ORGANIZATIONS													
26	Develop Integrated Watershed Management Plan	To imbed the land use plan into a greater watershed plan and proceed with actions as stated in the County's Action Plan	Lead: AB- Environment and Parks and the NSWA Second: P&D Community Sustainability Other Municipalities	AB Environment and Parks Delegate, NSWA 1. Planner 2. Spvr, Community Sustainability 3. Spvr, Parks and Rec 4. Villages	Jan-17	Jan-16	300	0.00	23,400.00	23,400.00	1	1	
27	Assist in providing resources for boat washing facilities	Design and have 2 portable boat washing facilities located at the Wabamun lake boat launch and the Provincial Boat Launch.	Lead: AB Environment and Parks Second: P&D Parks and Recreation Other Municipalities	Lead: Alberta Environment and Parks 1. Spvr, Parks and Recreation 2. Planner 3. Engineering Coordinator 4. Villages	Jan-17	Jan-18	100	0.00	7,800.00	7,800.00	1	1	
28	Complete Regional Groundwater Assessment Study (potential joint project with AEP and watershed municipalities)	AEP working in partnership with and other municipalities do inventory and analyze the state of groundwater in the Watershed.	CO-LED PROJECT Lead: Alberta Environment and Parks Second: Community Sustainability P&D Community Sustainability Engineering Services	Lead: AEP Delegate 1. Planner 2. Spvr, Community Sustainability 3. Engineering Coordinator 4. Spvr, Parks and Rec	Jan-20	Jun-21	490	200,000.00	38,220.00	238,220.00	3	3	
29	Develop a Wabamun Lake Capacity Study	Conduct a study to determine the number and types of boats to be allowed on Wabamun Lake at a given time. This will incorporate the findings of the Watershed capacity study to determine the total population within the watershed land and within the lake.	Lead: Alberta Environment and Parks Second: P&D Park and Recreation Other Municipalities	Lead: Alberta Environment and Parks and the NSWA 1. Planner 2. Spvr, Community Sustainability 3. Spvr, Parks and Rec 4. Engineering Coordinator 5. Villages	Jan-18	Jan-19	350	0.00	27,300.00	27,300.00	2	2	
TOTAL										2,776,910.00			

DISCLAIMERS:

- Capital and Operating costs are estimates only. Total costs are +/- a factor of % 50
- Resources needed are estimates only at this time
- Time allocation are estimates only at this time.
- This Plan in no way commits Council or individual departments to the completion of a project. The Action Plan is only an estimate of the resources needed to support the intended project. Resource allocation (staff and financial) may be further elaborated in detailed budget initiatives.**

 Indicates multi- year projects