



WATERSHED ALLIANCE

2016-2017 ANNUAL REPORT

THE BRWA

THE BATTLE RIVER WATERSHED ALLIANCE

We are the people who live, work and play in the Battle River and Sounding Creek watersheds. We are landowners, community members, business people, researchers, and decision makers. We are the people that will ensure a stable economy, healthy natural areas and resilient communities in this place that we love.

OUR VISION

By using sound knowledge, wisdom and wise actions, we ensure that the Battle River and Sounding Creek watersheds sustain abundant life, now and for future generations.

OUR MISSION

The BRWA provides relevant science, social science, policies and education for a diverse community of people to create solutions to our watershed's challenges.

OUR WORK

We accomplish our goal of connecting people to place for action in these four strategic areas:

Alliance Management
Watershed Management Planning
Education and Outreach
Stewardship

pages 4-5, 14-15 pages 6-7, 8

pages 8, 10-11, 13

pages 9, 12

ABOUT OUR WATERSHEDS

The Battle River and Sounding Creek are unique and intriguing prairie-fed watersheds. Home to over 120,000 people and spanning the boreal, prairie and parkland natural regions of Alberta and Saskatchewan, these watersheds are rich in history, culture and ecology. Beginning at Battle Lake and meandering across Alberta and Saskatchewan for some 1100 kilometers, the Battle River eventually joins the North Saskatchewan River at Battleford, Saskatchewan. While Sounding Creek has no outlet beyond Manitou Lake in Saskatchewan, it is a key water source for the people and wildlife that call the Special Areas home.

We face many challenges in our watersheds, such as degraded water quality, limited water supply, and increasing land use pressures, but we are a resilient community of people who are able to work together to find solutions to the challenges that face us. Great work is already being done to promote the long-term health of our watersheds.



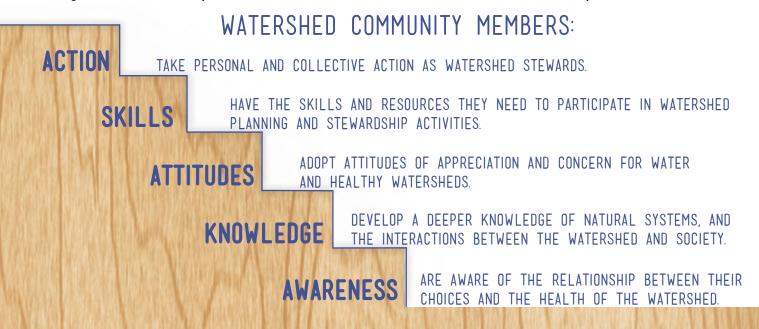
ABOUT OUR EMBLEM

To commemorate our 10th anniversary, the BRWA commissioned this artistic representation of our watersheds. The artwork was done by Geordie Nelson of Wainwright, who is a recent graduate from the Augustana Campus of the University of Alberta in Camrose. Within this emblem Geordie was able to capture some of the cultural, social, economic and environmental values of our watersheds. The emblem flows in a circular direction, representing the natural and seasonal cycles. We hope the watershed community sees itself and our home represented in this emblem.

AWARENESS TO ACTION

In this annual report, we explore watershed literacy. What is watershed literacy? It means thinking, planning, and acting with the watershed in mind through work, play, and everyday life. People who are watershed-literate make informed decisions concerning the social, economic, and ecological health of the watershed, both individually and collectively. They are willing to act on those decisions to improve the well-being of other individuals, societies, and the global environment, such as by participating in civic life.

The BRWA works to engage community members at all levels of literacy for life-long learning. Below are examples of how comunity members can connect to the five levels of watershed literacy. All are essential!



BRWA STEPS TOWARD WATERSHED LITERACY

Moving from Awareness to Action is a lofty goal. What we are asking Battle River and Sounding Creek residents, municipalities and others to do is to shift the current reality into something new.

At the April 2017 board meeting we had a lengthy discussion about what our future focus should be. We quickly agreed that we needed to broaden our education focus. An education focus has been central to the work BRWA has been doing for the past ten years. What is changing is what we want to talk about.

Throughout the last ten years we have been building a knowledge trust (Watershed Management Plan) about our watershed. We are building a set of recommendations for action directed to the Government of Alberta, municipalities, landowners and residents. We have completed six of the twelve components and are working on two more. Our focus is now shifting to encouraging all of us to take this knowledge, reflect on our situations, and take the next step along the Watershed Literacy Ladder (above). BRWA has partnered with the Government of Alberta on a water management plan, with the City of Camrose and Camrose County on a source water protection plan, and with landowners at Ferry Point, Ponoka and Iron Creek on riparian restoration. The challenge is for all of us to do something that will help move the watershed to a more sustainable state.

We are building awareness and knowledge about our watershed. We are helping people change attitudes and develop the necessary skills so their actions will purposefully impact our watershed. This is our collective opportunity to be creative with how we live, work and play on the landscape. I believe that our combined actions, large and small, random or coordinated, will over time re-shape our landscape. ~HUGH SANDERS, BOARD CHAIR

THE ALLIANCE

BRWA BOARD

ACADEMIA

Les Parsons University of Alberta

AGRICULTURE

John Pearson

Landowner

Wayne Richardson

Landowner

BUSINESS/INDUSTRY

Barb Bosh (Board Vice-Chair) ATCO Power Jim Geddes Private Energy Consultant

ENVIRONMENTAL NGO

Lorne Ferguson (Board Treasurer) Camrose Fish and Game Association Diane Hanson Alberta Rural Sustainable Alternatives Network

INDIVIDUAL

Hugh Sanders (Board Chair) Midge Lambert Al Corbett

MIINICIPAL GOVERNMENT

Bruce Cummins *MD of Wainwright*

Corinne Kelts Special Areas

PROVINCIAL/FEDERAL GOVERNMENT

Melissa Orr-Langner Alberta Agriculture and Forestry Shane Mascarin Department of National Defense

EX OFFICIO

Jamie Bruha Alberta Environment and Parks Jeremy Enarson City of Camrose

BRWA STAFF



2016 Staff Team (Left to Right)

Sheila Logelin - Office Manager Sarah Skinner - Watershed Planning Coordinator Jenna Szuch - 2016 Summer Program Assistant Nathalie S. Olson - Education and Outreach Coordinator David Samm - General Manager Susanna Bruneau - Research & Stewardship Coordinator

PROFESSIONAL DEVELOPMENT

Conferences

- Partners for the Saskatchewan River Basin: Every River Has A Story...What is Yours?
- Under Western Skies 2016:
 Water–Events, Trends, Analysis
- Spirit of the Land: Reconciling Land, Life & Livelihood
- Grey to Green Conference: Addressing Climate Change with Green Infrastructure
- Watershed Planning and Advisory Councils (WPAC)
 Summit

Workshops, Tours, and Webinars

- Cows and Fish Iron Creek Tour
- Environment Canada Coal Mining Session
- Alberta Urban Municipalities Association Wetlands Webinar
- Urban Forests and Stormwater Management Webinar
- Indigenous Water Initiatives Webinar
- CABIN Science Forum

Education and Training

- Watershed Resiliency and Restoration Program Speaker Series
- Professional Writing Workshop
- Masters in Environmental Education and Communication, Royal Roads Univeristy
- Walrus Talks H2O

SPONSORS AND SUPPORTERS

BUSINESS & INDUSTRY

2nd Floor Computers

Agriculture Financial Services Corporation

Agrium Inc.

Andrukow Group Solutions

ATCO Power

Battle River Implements

Bouma Meats

Bunge Canada

Cargill Canada

ConocoPhillips

Country Accent

Dalton Seed Farm: Pioneer Seed

Eastalta Co-op

Enbridge

Encana

Enerplus

Everest Trucking

Farm Credit Canada

Ireland Farm Equipment

Muldoon Trucking

Penn West Petroleum Ltd.

Populus Community Planning Inc.

RED The Agency

Real Canadian Superstore

Stafford Plumbing

UFA

GOVERNMENT

Agriculture and Agri-Food Canada Alberta Agriculture and Forestry

Alberta Environment and Parks

Beaver County

Camrose County

Canadian Forces Base Wainwright

City of Camrose

City of Edmonton

City of Lacombe

County of Paintearth

County of Stettler

County of Vermilion River

GOVERNMENT (CONTINUED)

County of Wetaskiwin

Environment Canada

Flagstaff County

Lacombe County

MD of Provost

MD of Wainwright

Montana Tribal Administration

Ponoka County

Special Areas Board

Samson Cree Nation

Summer Village of Argentia Beach

Summer Village of Crystal Springs

Summer Village of Golden Days

Summer Village of Grandview

Summer Village of Poplar Bay

Summer Village of Ma-Me-O Beach

Summer Village of Norris Beach

Town of Hardisty

Town of Killam

Town of Ponoka

Town of Sedgewick

Town of Viking

Village of Alliance

Village of Bawlf

Village of Bittern Lake

Village of Botha

Village of Consort

Village of Donalda

Village of Dollaida

Village of Edberg

Village of Edgerton

Village of Ferintosh Village of Forestburg

Village of Gadsby

Village of Halkirk

village of markirk

Village of Hay Lakes

Village of Lougheed

Village of Strome

Village of Paradise Valley

INDIVIDUALS

Don & Marie Ruzicka

Gaylene Halter

George Poruchnek

Hugh & Marg Sanders

ORGANIZATIONS

Agroforesty and Woodlot Extension Society

Alberta Beef Producers

Alberta Centre for Sustainable Rural

Communities

Alberta Conservation Association

Alberta Council for Environmental

Education

Alberta Real Estate Foundation

Alberta Ecotrust Foundation

Alberta Lake Management Society

Alberta Riparian Habitat Management

Society (Cows & Fish)

Alberta Trappers Association

Association for Life-Wide Living of Alberta

Augustana Campus, University of Alberta

Battle Lake Watershed Synergy Group

Battle River Community Foundation

Camrose Arts Society

Camrose & District Horticultural Society

Camrose & District Support Services

Camrose Open Door Association

Cargill Cares

Centre for Race & Culture

Ducks Unlimited Canada

Friends of Little Beaver Lake

Girl Guides Of Canada, Wolf Willow District

Inside Education

Iron Creek Watershed Improvement Society

Land Stewardship Centre

Owl Link Media Corporation

Paintearth Economic Partnership Society

Prairie Mines & Royalty ULC.

Parkland Airshed Management Zone

Pigeon Lake Watershed Association

Ponoka Fish & Game Association

Red Deer River Watershed Alliance Rotary Club of Camrose

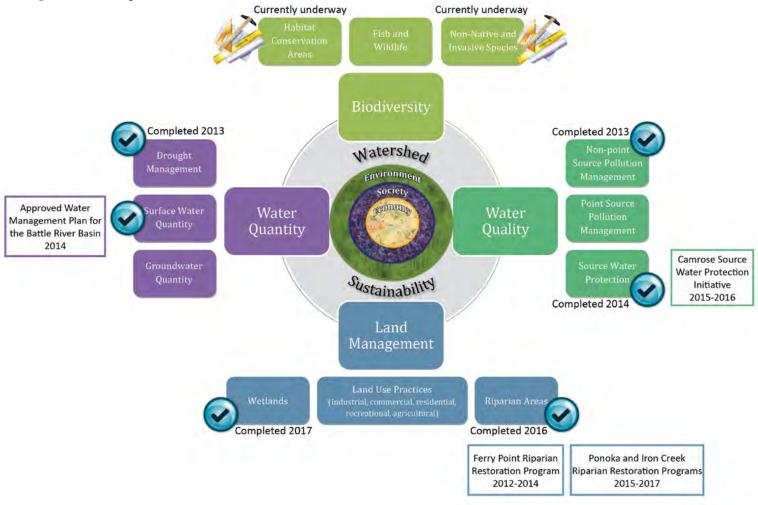
North American Waterfowl Management Plan

North Saskatchewan Watershed Alliance

Battle River, Ponoka County

WATERSHED MANAGEMENT

The diagram below displays the 12 components of the BRWA's Watershed Management Planning (WMP) Process and the work completed to-date. Each component includes a background research report, policy advice, amd implementation guidelines.



COMING UP NEXT

HABITAT CONSERVATION AREAS

Work has begun on the WMP component Habitat Conservation Areas. This component relates to areas of importance for biodiversity. This includes parks and protected areas, as well as other areas throughout the watershed that are important for fish and wildlife, including Important Bird Areas, environmentally significant areas, and habitat for sensitive and threatened species. Learning and understanding how we can manage our landscape and activities to make space for wildlife is an important part of watershed sustainability.

INVASIVE SPECIES

Invasive species management is another component of the BRWA's WMP process. A species is considered to be invasive if its introduction or spread causes (or may cause) harm to the local environment, human health, society or economic activity. There are a number of water and land-based invasive species that have the potential to impact the health of our watersheds. The BRWA is looking into actions that can be taken to manage invasive species that are already present in our watershed and limit the introduction of new invasive species.

COMPLETED THIS YEAR

Battle River, Ponoka County

PONOKA RIPARIAN RESTORATION

The second year of the Ponoka Riparian Restoration Program was a great success! 18 riparian health assessments have now been completed in the project area, covering a riparian length of 18 kilometres and an area of over 200 acres. Riparian restoration projects have been implemented with 7 landowners, including the planting of over 10,000 trees in the Battle River valley and the installation of 10 offsite livestock watering systems and 8 kilometres of riparian fencing.

The BRWA also hosted a riparian field day, in partnership with Cows and Fish, Grey Wooded Forage Association and Agroforestry and Woodlot Extension Society. This was a great opportunity for local landowners to learn about riparian health, plant ID, tree planting and woodlot management, and other riparian stewardship actions.

CAMROSE SOURCE WATER PROTECTION

Beginning in 2015, the City of Camrose, Camrose County and the BRWA partnered on an initiative to protect the Battle River, Driedmeat Lake and tributary streams as key water sources for the City of Camrose, the Village of Bittern Lake and the residents of Ohaton and Braim.

The Camrose Source Water Protection Plan was approved by the Councils of the City of Camrose and Camrose County in fall 2016. A multi-stakeholder advisory committee supported the development of the plan, and local residents and stakeholders also provided valuable input.

The plan identifies risks to water sources in the Camrose region and describes management actions that can be implemented to help protect and improve water quality. The BRWA is now working with the County and City to take action on the plan's recommendations.



Battle River Wetland

WETLANDS

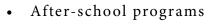
Wetland management is an important aspect of land use and stewardship. As wetlands are imbedded within the landscape, they are greatly impacted by what happens on the land. The BRWA has now finalized recommendations for wetland management in the Battle River and Sounding Creek watersheds!

Key aspects of managing wetlands is understanding what they are, as well as their functions and values as they relate to the ecosystem and to humans. In addition to flood and drought mitigation, having various sizes of healthy wetlands helps wildlife and bird populations. They also provide learning and recreational opportunities for bird watchers, canoeists, hunters, students, and researchers.

By working with all watershed stakeholders, we hope to move toward identifying key wetlands throughout the watershed that contribute to watershed health, sustainability, and well-being.

WHERE WE WORK





- Augustana Guest Lectures
- Caring for our Watersheds
- Girl Guides, Brownies
- Experience your Watershed Trips
 Discover your Wetland
 Crawling and Flying Insects
 Canoe Trips
- Explore More
- Healthy Active School Symposium
- Nipiy Education Week
- Summer Camps
- Waste in our Watershed Tours

COMMUNITY EVENTS

- Battle River Watershed Festival
- BRWA Annual General Meeting
- Camrose Book Bike Water Day
- Caring for our Watersheds Final Competition
- Church Group Watershed Days
- Make your Map Workshops
- Municipal Watershed Presentations
- Project Wild & Vitamin N Workshops
- Purple Martin Festival
- Saskatoon Pie Baking Competition

COLLABORATIVE PARTNERSHIPS

(PARTNER; PROJECT)

- · Camrose County; Living Heritage Tours
- City of Camrose; Stoney Creek Naturalized Playground
- Environment, Community, Health Observatory Network; National ECHO Project
- North America Waterfowl Association; Wetland Education Network
- Pigeon Lake Watershed Association; Watershed Management Planning Process
- Samson Cree Nation; Nipiy Committee
- University of Alberta, Augustana; Community Service Learning Students



Millet



- Camrose Source Water Protection Plan
- Municipal Invasive Species Conversations





STEWARDSHIP EDUCATION



"TO BE THE FUTURE STEWARDS OF THE PLANET, OUR STUDENTS NEED TO HAVE A RELATIONSHIP WITH THE NATURAL WORLD AROUND THEM.

-Laura Steinbach, Teacher

This quote sums up our education-for-stewardship mentality, and the activities in our school-based programs.



Watersheds May 2016 marked the 8th annual CARING FOR OUR WATERSHEDS final competition in the Battle River watershed. On the State of t final competition in the Battle River watershed. Students from across central and northern Alberta presented their ideas for what they could do to

improve their watershed. Ideas ranged from helping birds and biodiversity, to planting rain gardens, to installing plastic bag dispensers at trailheads. Many students took the next step to implement their projects.

IMPLEMENTATION ACTION

The 2016-2017 year has seen 4 Caring for our Watersheds projects implemented. Below is a short summary of each project. More projects can be seen at CaringForOurWatersheds.com



SAVING DRINKING WATER. ONE CUP AT A TIME

3 students from Daysland were fed up with seeing younger children filling up a cup of water, taking one sip, and pouring the rest back down the drain. Their idea was to create a "Thirst

Measurement" cup that could help kids take only the water they needed. These cups were handed out to all 220 kids in grades 1-6 at Daysland School, after a presentation on why water conservation is important.



DOWN CYCLE

Emily Jackson from Wetaskiwin wanted to green her school by installing water bottle fill-up stations. These stations reduce the need for disposable plastic bottles. Along with the stations, Emily worked with Student Council to promote the stations and create educational posters.



LIFE - LACOMBE IRRIGATION FOODS **EXPERIMENT**

Students in the EcoVision Club at Lacombe Composite High School have an active greenhouse and garden. To address the amount of water they were using, they proposed installing a drip irrigation

system. Drip irrigation uses far less water than average systems, and waters only where necessary. This system also has social benefits to their school as it can be set on a timer to water the plants on weekends or in the summer.



BOUT THEM WETLANDS

Bailie McDonald from Bashaw wanted to help protect wetlands, but felt limited in what she could do. So looking at her skills and interests, she decided to host a bake sale at her school and gave all of the funds to the Ducks Unlimited Piliated Project near her home.



WASTE IN OUR WATERSHED (WOW) TOUR

This new program, co-hosted by the BRWA, City of Camrose and Alberta Health Services, opened to all grade 4 students in Camrose in fall 2016. The full-day tour takes students to the Camrose wastewater treatment lagoons, Dried Meat Lake, the water treatment plant, a green space, the Centra Cam recycling depot and the City of Camrose landfill. Students learn about the solid waste that leaves their homes, as well as the water they consume and wastewater they produce. By the end of the day, students understand the waste cycles in Camrose, and are able to take action on water conservation and waste reduction.



X - STREAM SCIENCE

A hands-on citizen-science water quality monitoring program, the X-Stream Science program is open to stewards ages 13 and up. This past year, the BRWA hosted ten field experiences: nine with schools and one with the Friends of Little Beaver Lake Society. Participants learn about water quality and benthic invertebrate sampling and identification, and contribute data to an ongoing monitoring project.

This program gives stewards knowledge about watershed management, the skills needed to conduct water quality sampling, and facilitates the action required to take steps towards healthier rivers.



DISCOVER YOUR WETLAND

The Discover your Wetland field trips take students into local wetlands where their shoes get wet and their hands get dirty. Through a series of activities, games, and guided exploration, students come away with an increased awareness of, and appreciation for, wetlands. They learn about plants, wildlife, water cycles, water quality and the importance of protecting these important places. In May and June we took over 150 grade 5 students to wetlands!



EXPLORE MORE: IN HARDISTY AND WAINWRIGHT

Our popular Explore More program invites students in grades 4-6 to engage in a day of hands-on learning through a series of educational stations. Stations are hosted by various education and conservation agencies. This year we were joined by: Agroforestry and Woodlot Extension Society; Alberta Environment and Parks; Alberta Lake Management Society; Cows and Fish; Inside Education; Red Deer River Watershed Alliance; and Strix Ecological Consulting.

Through the activities and lessons provided by these guest experts, students gain the knowledge and attitudes needed to be the future stewards of our watershed.

OTIS AWARD

OTIS AWARD: FOR BEING OUTSTANDING IN STEWARDSHIP

In 2013, the BRWA started the OTIS Award to recognize the postive actions of stewards in our watershed. Each year we present 3 OTIS Awards in the following categories: Youth, Individual, and Business/Organization. The 2016 winners are:



YOUTH WINNER



INDIVIDUAL WINNER



SUSAN ELLIS

LOUGHEED COLONY SCHOOL

The students at the Lougheed Colony School have taken great pride and responsibility in planting and caring for their new trees. Through a small science grant, the students were able to purchase the trees, which were planted in their playground area. The school wanted to plant the trees to help the local environment, including cleaning the air and providing homes to birds. The school also looks forward to the windbreak and shade, as well as the aesthetic value and artistic inspiration the trees will provide. The students have proven their stewardship ethic by watering and weeding the trees to ensure their longevity, and are proud of doing their part to protect their environment.

Susan Ellis has worked tirelessly for many years with the Pigeon Lake Watershed Association. Susan's love for the lake, its watershed, and its people is evident in her care and dedication in spreading the message of lake stewardship. Her efforts have been instrumental in connecting with lake residents and stakeholders for their input and giving them the tools they need to take action. She has played a key role in ensuring that lake stewardship actions are based on the best science and social science available, and that this information is shared with all stakeholders. As a result, stewardship action in the Pigeon

Lake watershed is increasing.

ORGANIZATION WINNER



CHINOOK APPLIED RESEARCH

CARA, a non-profit society established in 1979, is a producerdirected society dedicated to expanding agricultural research activities in the Special Areas. CARA provides research, application, and extension programs that foster healthy and sustainable livestock and crop management practices. These programs include riparian health, shelterbelt workshops, off-site watering systems inventory, soil health, manure management, biological control of weed species, and Environmental Farm Plans. CARA helps landowners and producers manage their land and operations to ensure a productive business and healthy land.

COMMUNITY EVENTS

The 2016 **WATERSHED FESTIVAL** had a special buzz this year with a focus on pollinators. With the global decline of native pollinators and honey bees, festivalgoers learned about and could take action for pollinators. Thanks to Agriculture and Agri-Food Canada, who hosted a station on bees, people could increase their knowledge and awareness. Families could also build a bee hotel, taking action to provide pollinator habitat in their backyards.



YELLOW FISH ROAD is a nation-wide

environmental education program designed and managed by Trout Unlimited Canada and hosted locally by the Battle River Watershed Alliance. The Yellow Fish Road program's goal is to help Canadians understand that storm drains are the doorways to our rivers, lakes and streams.

In August 2016, the BRWA worked with members of the Quaker Society to paint yellow fish around the storm drains of downtown Camrose.

YOU CAN TAKE ACTION TOO - BRING YELLOW FISH ROAD TO YOUR TOWN!



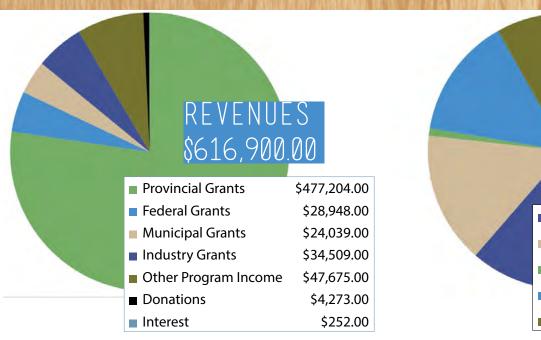
SASKATOON PIE BAKING COMPETITION

Is pie baking a positive skill for the watershed? Our Annual Pie Baking Competition encourages residents to get out into the watershed, find a patch of juicy saskatoons and bake a pie with our local bounty! This type of outdoor and handson experience can help form bonds with our watershed, increasing appreciation and forming positive attitudes.

2016 was the first year we hosted two pie contests - the first at the Ponoka Farmers Market, then in Camrose!

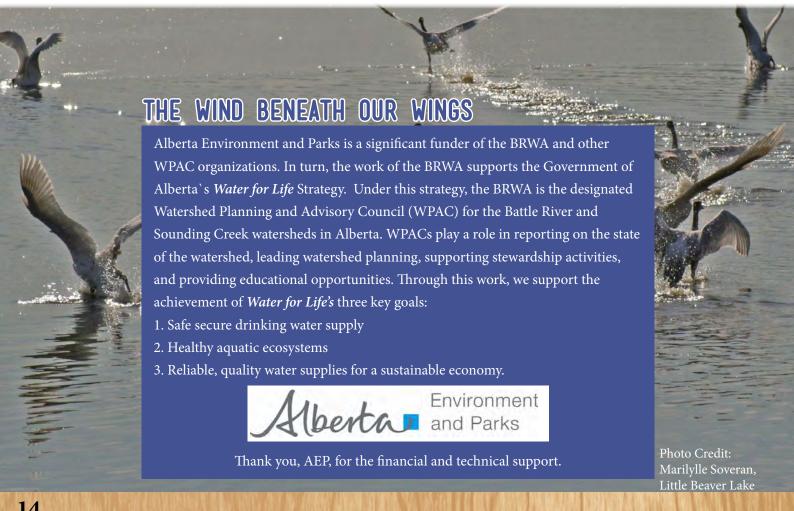


2016 - 2017 FINANCIALS





Members who would like a complete audited financial statement for the BRWA should contact Sheila Logelin at 780-672-0276. You can also find it on our website at www.battleriverwatershed.ca/publications.



LOOKING DOWN RIVER

A MESSAGE FROM DAVID SAMM, BRWA GENERAL MANAGER

This represents my 10th opportunity to "look down river" as the General Manager with the Battle River Watershed Alliance. This annual report outlines our achievements over the past year, and now I get to give you a glimpse into how our future work will continue to build on important goals listed in our current strategic plan. The Alliance continues to grow and serve the watershed in Watershed Planning, Education and Outreach and Ecological Stewardship.

Watershed Planning: We will continue to lead regional watershed management planning for the Battle River and Sounding Creek watersheds. This year we will launch or be partners in at least two new projects: 1) a riparian restoration program in the eastern reaches of the watershed; and 2) a 5-year, cross-Canada project examining the links between environment, community and health. We will also continue to complete WMP modules and design and deliver implementation activities from modules already completed. Our goal is to complete all modules by 2020.

Education and Outreach: Working with our partners, we will provide place-based experiential education. Our programming seeks to reach people of all ages, stages, cultures and communities. In 2017 (just in time for Christmas) we will print the new *Traversing Terrain and Experience* Atlas of the Battle River and Sounding Creek watersheds. We hope to distribute copies to all schools and libraries in our watersheds.

Ecological Stewardship: We will continue to support stewardship actions that align with our watershed management recommendations. This is tied to building an understanding of how our actions, positive and negative, make a difference to the health of our watershed. One of our goals is to develop in-house GIS capacity to inform stewardship actions across the watershed. We would also like to host a stewardship forum to bring watershed stewards together to celebrate stewardship successes and learn about new stewardship opportunities.

I look forward to working with our staff, board, partners, and community members in taking "steps" towards greater watershed literacy and watershed health in the coming year.





KEEP IN TOUCH!

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