



Athabasca
WATERSHED COUNCIL



Annual Report

2021-2022

ABOUT THE ATHABASCA WATERSHED COUNCIL

Established in 2009, the Athabasca Watershed Council (AWC) is a not-for-profit society and charitable organization guided by our vision, mission, and values.

Vision

The AWC strives to keep the Athabasca River watershed ecologically healthy, socially responsible, and economically sustainable.

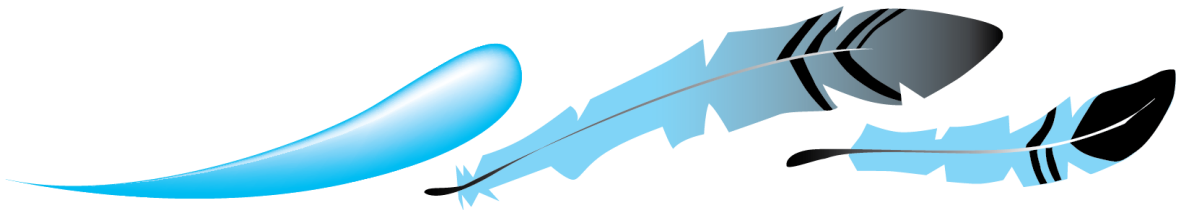
Mission

The Athabasca Watershed Council demonstrates leadership and facilitates informed decision-making in the Athabasca River watershed by bringing stakeholders and Indigenous peoples together to promote, foster respect, and plan for an ecologically healthy watershed that supports social responsibility and economic sustainability.

Values

Integrity, trust, and transparency • All points of view • Water as a blessing and a gift • Respect for the environment and people • Consensus decision-making • Economic necessities • A high standard of achievement and conduct • Ecological health as foundational to all life • Timely responses to issues • Indigenous peoples, culture, and knowledge • Inclusivity • Creativity, innovation, and risk taking • Being responsible and accountable to all members • Being purpose driven.

We will achieve our vision by collaborating with others to implement an adaptive approach to watershed management. Today, the AWC represents over 200 members and works with individuals and organizations from academia, industry, conservation, environmental and stewardship groups, Indigenous and rural communities, various levels of government and others to build knowledge and capacity, implement adaptive watershed management, and inform other land and resource management in the Athabasca watershed.



TREATY LAND ACKNOWLEDGEMENT

The Athabasca Watershed Council acknowledges that the Athabasca watershed includes portions of Treaty 6, Treaty 8 and Treaty 10 territories, as well as many First Nation and Métis communities. We respect the histories, languages, and cultures of all First Peoples of Canada, whose presence continues to enrich our vibrant watershed. We make this acknowledgment as an act of Truth and Reconciliation, and in recognition of those who came before us.

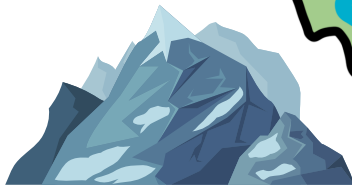
ABOUT THE ATHABASCA WATERSHED



At approximately 159 000 square kilometers, the Athabasca watershed makes up almost a quarter of Alberta's land base!



There are about 180 000 residents in the watershed.



The Athabasca River begins at the Columbia Icefields in Jasper National Park.



At 1,243 kilometers, the Athabasca River is the longest river entirely in Alberta (the Peace River is longer but originates in British Columbia).

The Athabasca River is part of the Mackenzie River system, which is the largest river system in Canada, and the 13th largest in the world.

There are several important bird areas in the watershed including the Peace-Athabasca Delta, Lac La Biche, Lesser Slave Lake, and Pelican Lake.

The Athabasca watershed is made up of ten sub-watersheds including the McLeod, Pembina, La Biche, Lesser Slave, and Clearwater tributaries; the Upper, Upper-Central, Lower-Central and Lower reaches, and, finally, Lake Athabasca.

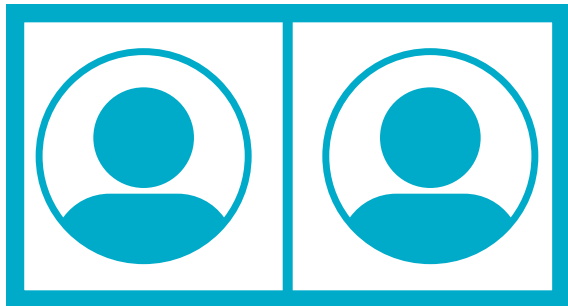
YEAR AT A GLANCE

The fiscal year 2021-22 was the Athabasca Watershed Council's 13th year of operations. Despite the continued presence of the Covid pandemic, it was a productive year for the board, its committees, project teams and staff. Several milestones were reached, most notably the board's approval of the *Athabasca Integrated Watershed Management Plan*. Overall, the AWC continued to build capacity and leverage resources by collaborating with others throughout the Athabasca watershed.

HIGHLIGHTS



- Approved the *Athabasca Integrated Watershed Management Plan*
- Assessed 3,934 kilometers of shorelines, released four riparian reports and posted data on the Riparian Web Portal
- Planted over 500 willow stakes at French Creek, a tributary of the Pembina River
- Sampled four sites in the Upper Athabasca, collected and analyzed 12,865 benthic invertebrates



- Hosted seven webinars attended by more than 300 participants
- Organized a four-part WPAC Summit attended by more than 240 individuals
- Made eight virtual school presentations
- Put together a travelling watershed display which was hosted at the Athabasca and Westlock libraries



- Held the AGM in June, held quarterly board meetings and organized 24 committee meetings throughout the year equalling 30 volunteers and an in-kind contribution of \$55,760
- Received core operational funds from Alberta Environment and Parks and several additional grant and corporate funds

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GREETINGS FROM THE PRESIDENT

On behalf of the Board of Directors, I am pleased to present to you the Athabasca Watershed Council's 2021-22 Annual Report detailing the past year - our 13th year of operations!

Despite continued Covid restrictions, board members continued to be well engaged, holding virtual meetings every quarter and working by emails to approve an updated three-year Strategic Plan, the final Integrated Watershed Management Plan and an updated Employee Handbook.

The Executive Committee met monthly to provide direction and advice to the Executive Director. Staff continued to play an integral role in growing existing and adding new AWC initiatives. Sarah MacDonald continued to grow our watershed science programs, adding projects in the Tawatinaw and Berland-Wildhay watersheds to existing programs in the Pembina and McLeod watersheds.

In August, we said goodbye to Indah Holmberg, who returned full time to school – we wish her well! Our new Education and Outreach Coordinator, Ashley Johnson, has been very busy growing existing communication tools like the website and social media, while also developing new initiatives, such as the traveling watershed display. Completing her first full year as Executive Director with the AWC, Petra Rowell has been focused internally on streamlining AWC processes, and externally on expanding relationships and support for the AWC.

A major role of the AWC is to convene and collaborate with others. This we did in spades in 2021-22! To all our members, partners and supporters who followed us over the year, thank you! We especially thank the Government of Alberta for providing our core funding. We also thank our sister WPACs for their support and mentorship. I personally would like to thank my fellow board members and the sector organizations that support their participation. In particular, I would like to acknowledge Directors and Alternates who retired in 2021-22 including Lavone Olson, Larry Armfelt, Colleen Powell, Sterling Johnson and Lorraine Johnstone MacKay. Going forward, with an effective governing board, engaged committees and great staff, I'm looking forward to a very busy 2022-23!

Sincerely,

Dan Moore



BOARD OF DIRECTORS AND STAFF

on March 31, 2022

Government

Abdi Siad-Omar | Alberta Environment and Parks
(Provincial Government) (Alternate – Curtis Brock)
Brigette Lemieux | Yellowhead County (Municipal – Upper
Basin)
Gary Cromwell | Athabasca County (Municipal – Middle
Basin) (Alternate – Rob Minns)
Lorin Tkachuk | Lac La Biche County (Municipal – Lower
Basin)

Our most heartfelt gratitude to
directors, alternates and staff
resigning in 2021-22 including Larry
Armfelt, Indah Holmberg, Sterling
Johnson, Lorraine Johnstone
MacKay, Lavone Olson and Colleen
Powell. We wish them the best in
their future endeavours.

Industry

Dan Moore, President | Alberta Forest Products Association/Alberta Newsprint Company (Forestry)
(Alternate Jennifer Knievel)
Janice Linehan | Suncor Energy Inc. (Oil and Gas)
Marv Fyten | Individual (Small Agricultural Producer)

Indigenous

Cleo Reece, Treasurer | Individual (Alternate Chantel Quintal)

NGO's, Stewardship, Academia

Morris Nesdole | Baptist and Island Lakes Stewardship Society (Health and Environment) (Alternate Julie
Hinks)
Brian Deheer | Individual (Health and Environment)
Kendra Gilbert, Vice-President | Baptiste Lake Conservation Group (Stewardship)
Paula Evans, Secretary | Crooked Creek Conservancy Society (Stewardship) (Alternate Alia Schamehorn)
Scott Ketcheson | Athabasca River Basin Research Institute (Research and Academia) (Alternate Robert
Holmberg)

Members-at-large

Tim Polzin | Individual (Member-at-Large) (Alternate Bill Grieve)
Laura Pekkola | Individual (Member-at-Large) (Alternate Paul Belanger)

Staff

Petra Rowell, Executive Director
Sarah MacDonald, Watershed Science Coordinator
Ashley Johnson, Education and Outreach Coordinator



Athabasca
WATERSHED COUNCIL

ACHIEVING OUR STRATEGIC GOALS

The AWC maintains a rolling three year strategic plan that includes five goals as outlined below:

Goal 1

The AWC provides easily accessible water-related information to stakeholders/sectors, the public and Indigenous peoples, leading to improved knowledge about the Athabasca watershed (Education & Literacy).

Goal 2

The AWC actively engages others in mobilizing resources and commitments to achieve shared outcomes (Convenor and Collaborator).

Goal 3

The AWC is a credible, recognized authority on the condition of the Athabasca watershed; this information informs implementation of the Athabasca River Integrated Watershed Management Plan, whose goals are achieved via healthy and active relationships with Athabascans and others (Policy and Planning, Monitoring and Reporting).

Goal 4

The AWC promotes the alignment and integration of land and water statutory and non-statutory policies, plans and program across jurisdictions where needed to achieve 'Water for Life' goals and a healthy Athabasca River watershed (Policy and Planning).

Goal 5

The AWC has a reputation for organizational professionalism, balanced representation, sustainability and effective and efficient use of resources; is strategically wise; and makes evidence-based decisions.

Each year we undertake a number of projects and actions to support the achievement of the strategy's five goals. The next two sections provide an overview of these activities for 2021-22.

2021-22 COMMUNICATIONS, EDUCATION & COMMUNITY ENGAGEMENT PROJECTS

Working towards strategic goals one and two, the Communications, Education and Community Engagement (CECE) committee renewed the CECE Strategy early in the year, which provided advice to the Education and Outreach Coordinator and other staff throughout the remainder of the fiscal year. The committee continued to meet and/or email with staff throughout the year to discuss various aspects of strategy implementation.

Communications:

- Produced weekly social media posts, driving up the number of followers on Facebook, Twitter and Instagram, which increased by 2,900%, allowing us to reach over 13,000 people!
- Produced monthly e-newsletters. Conducted a communications survey in June which said our newsletter readers want to hear more about what we are doing.
- Resurrected the AWC blog – the Athabasca Outflow. Check out the Year in Review blog on our website.
- Resurrected the AWC YouTube channel, adding several new riparian and wetland videos.
- Organized the annual photo contest, targeted at youth this year, and production of the 2022 AWC calendar. To get submissions, virtually presented to schools in Hinton, Athabasca, Boyle, Smith, Fort McMurray, and Fort Assiniboine to grades 1 to 5, and grade 8 (about eighty students). You can read about the contest winners on our blog.



479
followers



510
page likes



581
followers

Education:

- Continuously added new content to the website. Check out the 'Monitoring and Research' page.
- Resurrected the Athabasca Dispatch as a quarterly newsletter that dives deeper into water management issues with the first edition focused on Drinking Water.
- Completed a number of posters for the Lac La Nonne Education Centre including a poster with the Cree name of several plants and pollinators.
- Taken on the role of promoting the Alberta-Wide 'Caring for Our Watersheds' contest in the Athabasca watershed.

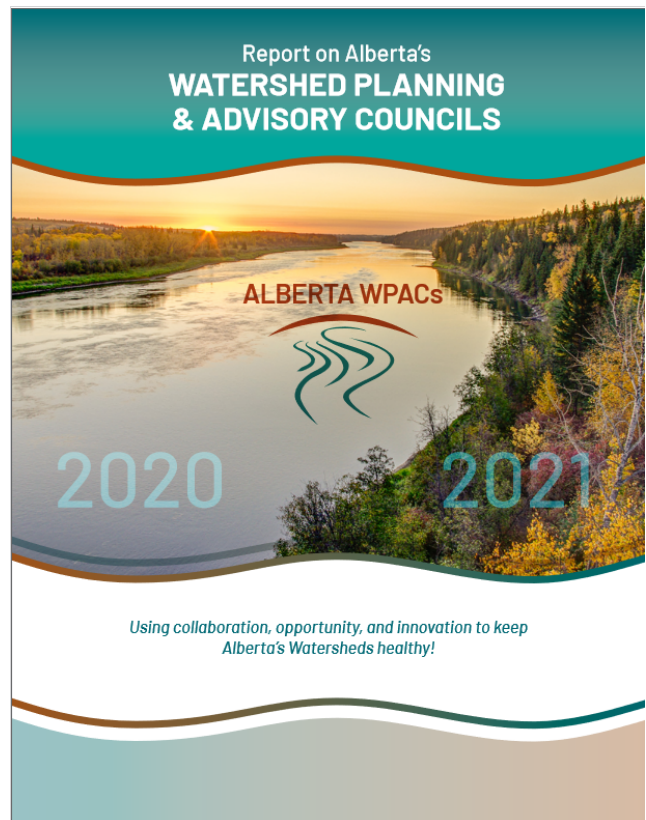
AWC Website Quick Facts

In 2021-22, the number of monthly website users increased from 468 to 711. Both the number of sessions and the number of pageviews increased by 64% and 52% respectively. The total number of sessions in the year was 7,772 and the total number of pageviews was 15,398.

Community and Sector Engagement:

- Corresponded with other WPAC Education and Outreach coordinators regularly and collaborated on a World Water Day webinar event that was attended by 135 participants, including several federal, provincial and municipal elected officials with opening remarks by the Minister of Environment.
- Hosted the biennial WPAC Summit as a series of four webinars on four Fridays in October.
- Organized a mobile watershed exhibit with its first engagement at the Alice B. Donahue Library in the Town of Athabasca, followed by the Westlock library. Read an article about it on Town and Country Today. If you'd like to have our mobile library exhibit visit your community, contact us at outreach@awc-wpac.ca.
- Collaborated with a Parks Canada Interpreter on a joint Athabasca River presentation to the National Interpretive Guides Association.
- Organized an online scavenger hunt in conjunction with the One Book – One Community event in the Town of Athabasca.
- Hosted a series of casual virtual “Coffee Talks”, including a Christmas Open House to connect with Directors and members.
- AWC director Morris Nesdole continued to represent all 11 WPACs on the Alberta Water Council. He also participated on their drought and source water protection planning teams.
- AWC director Laura Pekkola continues supporting a WPAC project team creating a watershed 101 video series.
- Met with other WPAC managers quarterly to discuss common challenges and together with the North Saskatchewan Watershed Alliance, took the lead in developing the annual WPAC Compendium.

Watershed Planning and Advisory Council Summit



2022 CALENDAR



Ashley at a One Book, One Community Event.

MI-KA-SIOO LAC LA NONNE

Native Plants and Pollinators

Plants

Lac La Nonne is in the Boreal Mixedwood ecoregion. It is the traditional territory of Woodland Cree, Stoney, and Métis nations.

Native plants are important to prevent soil erosion, and are a source of food and habitat for local wildlife. Consider planting some native species in your garden!

Cree plant names are from the public version of the Sagow Pimachiwin guidebook.

Cree: Népisé
English: Willow (*Salix* spp.)

A good early food source for bees, because willows begin to bloom early in the spring. Willows like to grow in wet areas, close to water.



Cree: Áyôskana
English: Wild raspberry (*Rubus* spp.)



Wild raspberries bloom in late June to early July, and the fruit ripens shortly after the blooming ends.

Pollinators

Native pollinators are essential. Many plants rely on pollination to be able to produce seeds. The pollinators on this poster are just some of the many types in Alberta.

Cree pollinator names are from www.creedictionary.com. Pollinator information is courtesy of the Canadian Wildlife Federation:



Cree: Ámopewayis
English: Hummingbird



The hummingbird pictured here is a ruby-throated hummingbird. Hummingbirds transfer pollen that gets on their feathers as they fly from flower to flower.

Cree: Kamâmak
English: Butterfly

Alberta has many butterflies, including the swallowtail pictured here. Their pollen transfer is from their legs and body as they flutter about.



Cree: Okiniwapakwaniya
English: Wild rose (*Rosa* spp.)

Wild roses bloom in late June to early July. They are good for pollinators foraging in early summer. Rose hips can be harvested in the fall.



Cree: Wâpanewask
English: Yarrow (*Achillea millefolium*)

Yarrow flowers in June, and can continue flowering into September. Other good late summer flowers are fireweed, goldenrods, and asters.



Cree: Sâskatômina
English: Saskatoon (*Amelanchier alnifolia*)



Saskatoon flowers attract bees in the spring. The berries are a good food source for birds and bears in the summer.

Cree: Osâwamow
English: Wasp



Wasps like this paper wasp are pollinators. Wasp larvae are also predators that help to control insect populations.

Cree: Âmô
English: Bee

There are over 200 types of bees in Alberta, including several types of bumblebee, which is pictured on the right.



Cree: Môhtew
English: Moth

The moth on this poster is a hummingbird moth. They like to fly and feed from flower nectar during the day, spreading pollen that gets onto their body from flower to flower.



Lake management is a collaborative effort between stewardship groups, non-profit organizations, government and the members of the public that reside and recreate there. The Lac La Nonne Enhancement & Protection Association would like to thank the following partners for their support in making this project possible:

2021-22 SCIENCE PROJECTS

To achieve goals 3 and 4 of our strategic plan, the AWC maintains a Technical Committee that oversees AWC science initiatives. This committee met several times and worked via emails in 2021-22, to complete the *Athabasca Integrated Watershed Management Plan* (IWMP), approved by the AWC Board in February 2022.



Athabasca Integrated Watershed Management Plan

February 2022



Goals of the Integrated Watershed Management Plan:

1. Everyone in the Athabasca watershed has access to safe, secure drinking water supplies.
2. Aquatic ecosystems are healthy and biologically diverse.
3. River flows and lake levels meet social, cultural, economic and environmental needs.
4. Natural land cover is conserved, and cumulative land use pressures on water are mitigated.
5. Traditional Knowledge informs decision-making and planning.
6. Policies and plans are aligned for watershed health.
7. The impacts of climate change are known and inform community preparedness.
8. Sub-basin and lake assessment, planning and stewardship initiatives are supported.

With the IWMP goals in mind, the AWC continued to build on existing projects and initiated several new projects in 2021-22 to support plan implementation, including the following:

Upper Athabasca:

- As a partner in the East Slopes [Biomonitoring project](#), collected 15 benthic invertebrate samples from 4 sites in the Upper Athabasca; 12,865 invertebrates collected and classified and results shared [via webinar](#).
- Collaborating with the Canadian Wildlife Federation, convened a stakeholder group to develop a plan for [waterbody crossing mitigation in the Berland-Wildhay Watershed](#) north west of Hinton.



Rail crossing over the Berland River. Photo from albertaparks.ca.

Mid Athabasca:

- Continued to build on the [Pembina Riparian Assessment reports](#) (with data now available online via the [Riparian Web Portal](#)) partnered with 8 organizations to form the Pembina Technical Working Group, which is currently working on a state of the Pembina report.
- Partnered with Highway 2 Conservation and Westlock County to do a [willow planting on French Creek](#), a small tributary to the Pembina.
- Commissioned a [riparian assessment report](#) for the Tawatinaw watershed (226 kms assessed).
- Continued to support [lake initiatives](#) such as the Lac La Biche, Lac La Nonne, Baptiste and Island lake stewardship groups.



Lower Athabasca:

- Together with EPCOR, North Saskatchewan Watershed Alliance and Alberta Environment and Parks, supported an NSERC application by William Zhang, University of Alberta that will see work on a water quality model under ice for northern rivers.
- Met with WaterSmart (October 20th) to discuss a new phase of work on the previous Athabasca River Basin initiative.

Basin Wide:

- Held two workshops (Feb. 4 and 15) with Alberta Environment and Parks staff and the Lesser Slave Watershed Council to discuss in detail how WPACs can support the Government of Alberta's Lower Athabasca Regional Plan and the Upper Athabasca Surface Water Quality Management Framework.
- Partnered with second year SAIT student Laura Nethery (Integrated Water Management Program) to send a survey to 34 rural and Indigenous communities on drinking water and community resilience. Initial findings were mixed and staff hope to continue to have discussions about [community resilience with regards to drinking water](#) in the future.



Ashley (pink hat) and Sarah (the photographer of this picture) headed out to help Highway 2 Conservation and county representatives with a [pond leveler installation](#) (left). Pond levelers are a tool for beaver co-existence (right).



Sarah and Petra at Whitehorse Creek on our site selection trip (above), and recording stream velocity in the McLeod River (below).



Sarah taking a kick net sample in the McLeod River.

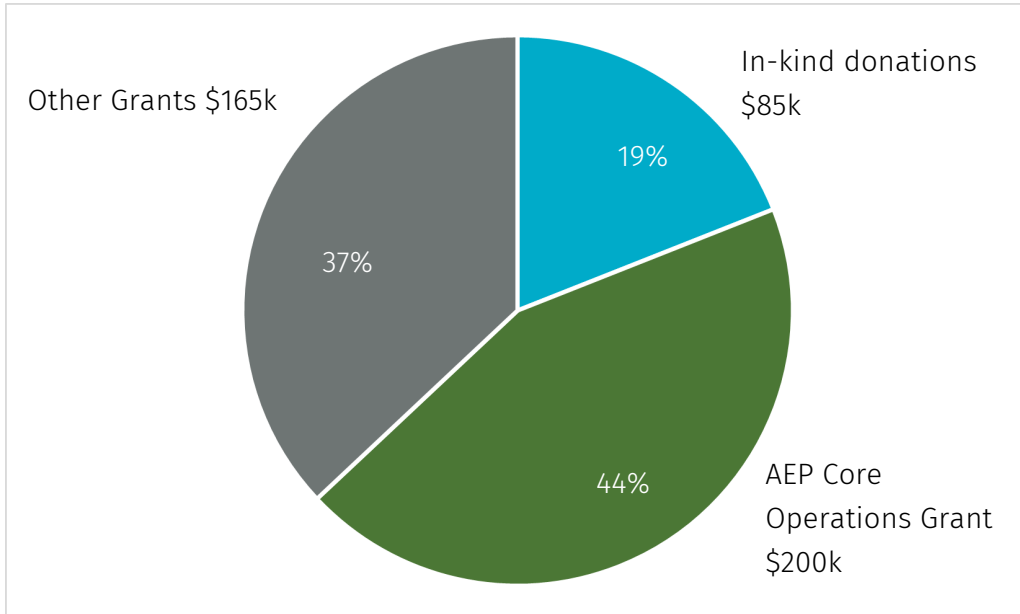


Petra and Paula conducting a pebble count at Solomon Creek.

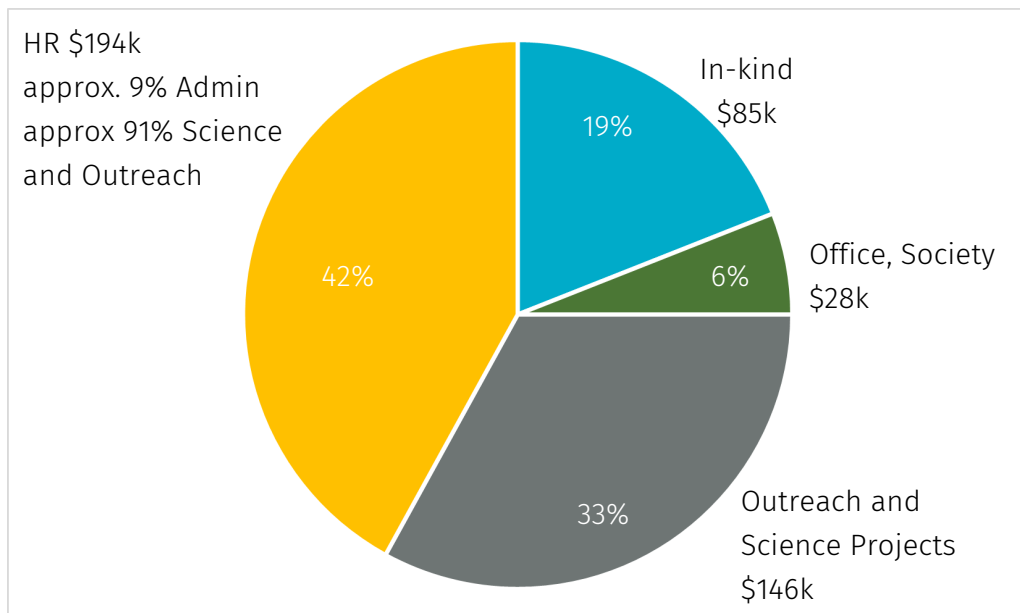
FINANCIALS

To achieve goal 5 of our strategic plan, the AWC board of directors works to maintain good governance and an efficient administration. This includes maintaining staff, an office in the Town of Athabasca, and an operating budget. A summary of 2021-22 revenues and expenses are provided below. For a detailed financial statement, please contact the office.

2021-22 REVENUE



2021-22 EXPENSES



ACKNOWLEDGMENTS

Cover art: Athabasca Rainbow Trout by Ashley Johnson. This report was edited by Ashley Johnson, Education and Outreach Coordinator. Unless otherwise stated, photos and graphics were provided by Athabasca Watershed Council Staff, or inserted from Canva Pro.

Financial Support

The Athabasca Watershed Council's work is possible with financial support from:

- Alberta Environment and Parks
- Alberta Conservation Association
- Alberta Ecotrust Foundation
- TD Friends of the Environment Foundation

Thank you for supporting the Athabasca Watershed Council.

In-Kind Support

The Athabasca Watershed Council receives in-kind support from volunteers and partner organizations.

Thank you to our volunteers, including:

- Field support – Lavone Olson, Paula Evans
- Alberta Water Council board and teams – Brian Deheer, Dan Moore, Morris Nesdole
- AB WPACs video project – Laura Pekkola and Brian Deheer
- Lac La Biche Watershed Management Plan – Tim Polzin

Collaborations

The Athabasca Watershed Council would like to extend a heartfelt thanks to all of our generous collaborators from the past year, including:

- Alberta Water Council
- Alberta Watershed Planning and Advisory Councils (WPACs), including collaboration on a World Water Day event, with speakers Api'soomahka, Rita Wong, and Brian Smerdon.
- Eastern Slopes Aquatic Monitoring Collaborative
- Lisa Card, with Highway 2 Conservation
- WPAC Summit Speakers, including Bev Yee, Deputy Minister with Alberta Environment and Parks; Dan Moore, AWC President; Dustin Twinn, Swan River First Nations; Georgia Peck, Kat Hartwig, and Santiago Botero, Living Lakes Canada; Glenn Semenchuk, Cumulative Environmental Management Association; Heather Stocking, Town and Country Today; Lisa Allan, Freshet Creative Services; Michael Short, Let's Go Outdoors; Mike Kelly, Bow River Basin Council; Tom Rutherford, Cowichin Watershed Board; Zita Botelho, Watersheds BC.
- Members of the Pembina Shorelines and Wildhay Berland Connectivity Working groups.
- Pembina River Watershed Technical Advisory Committee

LOOKING FORWARD TO 2022-2023

With 2021-22 now well behind us, we look forward to taking our learnings and new partnerships forward into the future. 2022-23 promises to be another busy year and we wouldn't have it any other way! Looking forward to seeing you out in the watershed soon. We will be continuing a number of projects, including the Berland-Wildhay Watershed Connectivity Remediation Planning Project, the Athabasca Watershed Shorelines Initiative, the Upper Athabasca River Watershed Biomonitoring Project, the Community Drinking Water Resiliency Project, and the Mobile Watershed Display Project. If you have any projects in mind for the AWC, feel free to reach out to us.

For more information about the Athabasca Watershed Council, please contact Petra Rowell at 780-213-0343 or executive.director@awc-wpac.ca.



Big-horn sheep near the Teck mine, Cadomin, Alberta.

LINKS OF INTEREST

Our blog: <https://awc-wpac.ca/athabasca-outflow-blog/>

- Calendar Contest blog post: <https://awc-wpac.ca/2021/12/2022-youth-calendar-contest-winners/>
- Year in Review blog post: <https://awc-wpac.ca/2021/12/awc-2021-in-review/>
- Pond Leveler Installation blog post: <https://awc-wpac.ca/2021/08/out-and-about-pond-leveler-installation/>
- Benthic Invertebrates in the Headwaters of the Athabasca Watershed blog post: <https://awc-wpac.ca/2022/04/benthic-invertebrates-in-the-headwaters-of-the-athabasca-watershed/>

Our projects: <https://awc-wpac.ca/projects/>

- Athabasca Watershed Shorelines Initiative: <https://awc-wpac.ca/athabasca-watershed-shorelines-initiative/>
- Upper Athabasca River Watershed Biomonitoring Project: <https://awc-wpac.ca/projects/upper-athabasca-biomonitoring/>
- Berland-Wildhay Watershed Connectivity Remediation Planning Project: <https://awc-wpac.ca/berland-wildhay-watershed-connectivity-remediation-planning/>
- Mobile Watershed Exhibit: <https://awc-wpac.ca/mobile-library-exhibit/>
- Community Drinking Water Resiliency Project: <https://awc-wpac.ca/projects/community-drinking-water-resiliency-project/>

Where we've been featured in the news: <https://awc-wpac.ca/news/>



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