

working together to nurture, share, and protect the waters of the bow river basin

Message from the Chair: Steve Meadows

It has been a very good year for the BRBC! We have been able to return to in-person meetings while continuing with the advantages of online events. This gives us great flexibility with which to reach out and interact with our membership. It also allows for a greater degree of collaboration than we previously enjoyed. The board continues to focus on long-term priorities while allowing flexibility to respond to shorter-term needs in the basin.

After changes to the BRBC Board last year, we are fortunate to have settled on a diverse and talented board that continues to work toward improved water management in the Bow River Basin. My thanks to both the present and past members of the board – the BRBC is that much stronger because of your commitment and support.

With the return of many inperson gatherings, our <u>Standing</u> <u>Committees</u> continued to use the flexibility and enhanced connectiveness of online meetings. Each committee will continue to evolve their meeting approaches to suit their members' needs, strategic objectives and deliverables. During the past year our committees met and exceeded all challenges, and we anticipate they will continue their commitment and hard work. In 2022, the BRBC delivered quarterly forums, a science forum, a drought workshop, and the usual plethora of excellent communication pieces. The committees continue to be our core strength. My thanks to all committee members.

I also wish to thank all the supporters of the BRBC for their continued endorsement of our goals and activities. This support has allowed the organization to successfully navigate and respond to uncertainty and rapidly shifting priorities. As a result, the BRBC continues to grow in both size and capacity, enabling worldclass contributions to watershed management in the basin.

Last June we saw the departure of our past Board Chair, Erwin Braun, and our long-standing Treasurer, Zennon Zaluski, both of whom were key to our previous successes. Zennon had been

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BRBC Board Members

BRBC Chair: Steve Meadows Treasurer: Mark Bennett Executive Director: Mike Murray

Commercial/Industrial: Jason Mogilefsky Liliana Bozic

Municipal Government: Harpreet Sandhu (2nd Vice Chair) Jason Schneider

Non-Profit/Academic Pablo Pina Alan Breakey

Regulatory/Administrative/First Nations Rob Wolfe Sarah Hamza

Licensee: Richard Phillips (1st Vice Chair) Scott Taylor

Individual Public: Steve Meadows Chris Manderson

a Treasurer through most of BRBC's history. Fortunately, we had another long-term BRBC stalwart, Mark Bennett, assume the Treasurer's position.

The BRBC also continues to have excellent staff working diligently to enable the Board, committees and the membership at large to succeed. Brooke Kapeller fills the role of Program Coordinator with enthusiasm and skill. She is instrumental in keeping our committees and events as successful as ever, and is leading the development of our next State of the Watershed report. We have also been privileged to have Alesia Cameron join us to work on the Climate Change portion of the State of the Watershed report.

BRBC Financial and Member Services Officer, Medini Prasai, continues to ensure the smooth running of BRBC finances and membership support. The expertise that he provides through fund development and project reporting is critical to our success. Our Publications Editor, Andrea Czarnecki, works hard to deliver high-quality newsletters and bulletins that showcase not only our members' watershed efforts, but also news and research from around the world. BRBC Executive Director Mike Murray continues to navigate the organization skillfully and diligently to new successes. All the work and initiative that Mike and the staff have put into supporting the membership, committees and Board are much appreciated and allow us to look forward to the upcoming year with great expectations of accomplishment and success.

BRBC Committee Updates

Stakeholder Engagement Committee

Jen Makar, Co-chair

2023 was an exciting year for the Stakeholder Engagement Committee (SEC). We have a core group of committed volunteers who have been working together for the past number of years. We also saw some new faces which added fresh perspectives to our work. The SEC celebrated the completion of the new brand refresh and website design. The BRBC social media presence continues to reach people from across the basin connecting all of us with news, opportunities and highlights from the watershed. The SEC continued to deliver on our core activities including virtual forums, the Annual General Meeting and the quarterly newsletter Preserving Our Lifeline.

In an effort to support the BRBC's commitment to diversity, equity and inclusion, the SEC began work to identify opportunities to offer an inclusive environment for all current and future members. This work will continue when we reconvene into the fall and will be a central focus moving forward.

The SEC meets approximately eight times annually. It is comprised of members with very diverse backgrounds and there is a standing invitation for any interested individuals to join the committee. Please contact Medini Prasai at <u>medini. prasai@brbc.</u> <u>ab.ca</u> for details.



Fenland Trail, Banff. Photo: Andrea Czarnecki.

BRBC Committees

Legislation and Policy Co-chairs: Judy Stewart & Rob Wolfe

Science

Co-chairs: Alan Breakey & Wendell Koning

Stakeholder Engagement Co-chairs: Harpreet Sandhu & Jennifer Makar

Youth and Young Professionals Co-chairs: Nisha Saini & Pablo Pina

Watershed Stewardship Chair: Liliana Bozic

Legislation and Policy Committee

Judy Stewart, Co-chair

From May 2022 to January 2023, the Legislation and Policy Committee met both online and in person. In 2022, after completing a comprehensive follow-up to the previous year's aggregate workshop and discussions with provincial government representatives, the Committee worked on identifying emergent issues that might be appropriate for a spring 2022 workshop.

The spring workshop, "Flood Update 2022," was well attended and, as usual, our speakers were interesting and compelling. The Committee acknowledged that this workshop could just as easily have been about potential drought in the face of severe weather events arising from climate change.

After the Committee's review of top-of-mind issues in September 2022, we settled on "Adapting to Multi-Year Drought" for our 2023 spring workshop. This was our first in-person workshop since 2019 and the networking was spectacular! Our speakers gave us plenty to think about as we headed into another spring and summer season. The take-away message was that severe weather events associated with climate change are unpredictable and there is a great deal of uncertainty in any drought adaption monitoring, data collection and resilience programming. The most important aspect is that all sectors in the Bow Basin need to be prepared to collaborate



Panelists at the Spring Workshop. Photo: Mike Murray.

should a multi-year drought emerge over time affecting our health and prosperity as a regional community. The City of Calgary's <u>Drought Resiliency Plan</u> illustrated the complexity of adapting to drought conditions and provided a way forward for everyone to consider.

In 2022, the Battle River Watershed Alliance presented the Committee with information about their opposition to an intensive feedlot operation proposed for the lands adjacent to Pigeon Lake. A court decision halted the application. The Committee is in the process of determining if this issue is common in our basin, and if this should be a major topic for us to explore. The Agricultural **Operations Practices Act (AOPA)** is a complex piece of legislation whereby the Natural Resources Conservation Board regulates the location and operation of intensive feedlot operations near water bodies. Perhaps the Committee

will need to have a look at AOPA and the regulations.

This past year saw further amendments to the *Municipal Government Act* (MGA) and other legislation through the *Red Tape Reduction Implementation Act.* These amendments are worth exploring in 2023 to see how they may impact watershed management in the Bow, and the Committee continues to work with BRBC members to identify emergent hot topics that may be helpful in reviewing and analyzing water management legislation, regulations and best practices.

The Committee meets on the third Friday of each month or at the call of the chair, and we are always looking for new members! We continue to have a mix of online and in-person meetings to accommodate our diverse membership. If you are interested in joining us for some fascinating conversations, please contact <u>BRBC staff</u>.

Youth and Young Professionals Committee

Nisha Saini, Co-chair

The Youth and Young Professionals Committee (YPC) currently has around 50 members, of which approximately 20 are active.

From April 2022 to March 2023, the YPC continued to coordinate and run four more <u>tours of stormwater and green</u> <u>infrastructure</u> surrounding Calgary, in collaboration with MAGNA Engineering. Each stormwater tour was attended by approximately 15 people from a variety of sectors to learn about stormwater management innovations across the Bow Basin!

In September, YPC also coordinated efforts with the City of Calgary's Riparian Monitoring Team to host an afternoon walking tour of the Inglewood Bioengineering Demonstration and Education Project for around 30 participants.

This February, YPC partnered with CPAWS for a guided educational/snowshoe walk in Brown-Lowery Provincial Park, where approximately 15 participants learned about the watershed, wildlife, and vegetation in a winter setting.

Throughout the year, our committee members also shared their knowledge of the basin at various community events, such as Inside Education's Navig8 conference for high school youth, and helped coordinate the Science Forum.



Tour of the Inglewood Bioengineering Demonstration and Education Project. Photo: Youth and Young Professionals Committee.



Guided walk in Brown-Lowery Provincial Park. Photo: Nisha Saini.

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Science Committee

Wendell Koning, Co-chair

Fiscal year 2022-2023 was once again very active for the Science Committee. Meetings were held monthly, both online and inperson. The annual Science Forum, held on May 4th, was the very first BRBC in-person event post-covid! Committee accomplishments for the year include the following.

Workshops & Forums

The BRBC Citizen Science Workshop/Forum was held on April 12th. This was a half-day, online event with presentations from the Ghost Watershed Alliance Society, the Bragg Water Quality Monitoring Collective, and the Alberta Lakes Management Society. Topics included: funding for citizen science groups, monitoring methods, volunteer recruitment, and the successes and challenges in carrying out citizen science. Much to our benefit, we organized this event with the Alberta Citizen Science Community of Practice. This organization is a leader in citizen science and graciously delivered the event's keynote address.

The annual BRBC Science Forum, was held in-person on May 4th at SAIT. It was a very successful gathering that included 15 presentations and a poster gallery featuring 7 displays. We were overwhelmed with the response to our Call for Abstracts, with double the number of abstracts than what we could accommodate. This was a challenge we were happy to manage!



The annual Science Forum at SAIT's Heritage Hall. Photo: Cecilia Chung.

On November 4th we held an in-person "Community Science Workshop: Biomonitoring in the Bow." One focus was the CABIN methodology and training. CABIN (Canadian Aquatic Biomonitoring Network) is a standard methodology for sampling benthic aquatic invertebrates. The workshop was co-sponsored/ organized with Living Lakes Canada, which worked very well! In the morning we had speakers from Environment and Climate Change Canada, Living Lakes Canada, the Oldman Watershed Council, Ghost Watershed Alliance Society, the Elbow River Watershed Partnership, and the University of Calgary. Discussion items in the afternoon included the need for further training and greater capacity; data storage, analysis and interpretation; creation of community-based water

monitoring programs; concerns regarding multiple land-use pressures and the need to have effective tools to monitor impacts; and lastly, concern for fish species at risk.

Ongoing Science Committee Activities

Groundwater Monitoring

We have a subcommittee looking into how we can promote the collection of more groundwater data, as this is an underrepresented area in river basin data. Currently there is a very good, long-term program that measures groundwater levels in Rocky View County (in conjunction

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with UCalgary researchers). Can we find a way to expand this program to other counties in the Bow Basin? Groundwater levels, as measured in domestic water wells and based on long-term data sets, frequently correlates very well with surface water flows in nearby streams, but the specifics are different in each watershed and sub-watershed.

Preparing for Drought

How can we effectively communicate water shortages to licencees in specific watersheds? Currently, while provincial websites provide helpful information, there is no direct communication with those licensees who, through their withdrawals, can greatly influence water volumes in specific streams. Our committee continues to explore whether more can be done in communicating to streamspecific licensees in order to help ensure environmental flows (instream flows) that are critical for the long-term health of a stream.

Provincial Water Reuse

This is a very important subject in southern Alberta basins, including the Bow Basin, as they are closed to any new water licences. Our committee seeks to find ways to encourage progress in water reuse, both in terms of challenges (e.g., safe use and ownership) and benefits (e.g., reuse in irrigation and industry).

Climate Change

The Bow Basin State of the Watershed (SOW) report is currently being prepared by the BRBC and will include a chapter on



Climate Change Workshop. Photo: Bow River Basin Council.

climate change. This chapter will summarize the current situation from global, national, and basinlevel perspectives. The Science Committee provided support to the BRBC's Climate Change Workshop (held April 14th, 2023) to inform the State of the Watershed report. The goals for the workshop were to have the Bow River Basin community come together to share knowledge and experience on adaptation projects. Policy constraints and how to build adaptive capacity in the Bow Basin were also addressed.

Water Quality

Some members of the Science Committee are also part of the State of the Watershed Water Quality Technical Committee (WQTC). The goal of WQTC is to determine water quality reporting indicators and visual tools to be used in the SOW. Indicators will likely include water chemistry related to nutrients, major salts, dissolved oxygen, and physical indicators of temperature and pH. Challenges include whether and how to include water quality data from various sources and iurisdictions.

The Science Committee is currently comprised of individuals from the consulting world, municipal and provincial governments, scientists, and retirees. Together we have very stimulating meetings, cover many subjects, and work hard to find ways to use our scientific understanding to benefit residents in the Bow Basin.

Watershed Stewardship Coordinating Committee

Liliana Bozic, Chair

The Watershed Stewardship Coordination Committee (WSCC) membership consists of representatives from:

- Watershed Stewardship Groups: Nose Creek Watershed Partnership, Elbow River Watershed Partnership, Ghost Watershed Alliance Society, Friends of Fish Creek, Highwood Management Plan PAC, Bighill Creek Preservation Society, Calgary River Valleys, among others
- ENGOs: Foothills Land Trust and River Watch
- Individual Stewards
- BRBC Staff
- BRBC Board Chair

The committee met three times in 2022 (January, April and October) and twice so far in 2023 (January and June). During the meetings, member activities were shared and collaboration opportunities were discussed. Some of the on-going programs undertaken by watershed stewardship groups include monitoring, summer outreach through field studies, pop-up educational events, riparian restoration, and bioengineering demonstrations and projects.

The December 2022 Educational and Networking Forum was hosted by the WSCC at the Foothills Centennial Arena in Okotoks. The forum was attended by over seventy participants and included updates from the Nose Creek Watershed Partnership, Jumpingpound Creek Watershed Partnership, Upper Fish Creek Watershed Association, and the Friends of Fish Creek. A demonstration of the Riparian Web Portal was given by Rosemarie Feriuc (Red Deer River Watershed Alliance), and Chad Willms (Government of Alberta) presented on the Springbank Off-Stream Reservoir Project.



The December Educational and Networking Forum focuses on watershed stewardship and is hosted by the WSCC. Photo: Bow River Basin Council.



Joe Fowler sharing his knoweldge and energy at a Community Science BioBlitz Pop-Up event at Bebo Grove. Photo: Kathryn Hull.

An important milestone for the group was securing funds for the Watershed Stewardship Strategic Support Coordinator role. This new position is meant to support and promote all forms of stewardship within the Bow Basin. In April, we welcomed Joe Fowler in this role. Joe will lead a number of outreach activities and education programs, including the Freshwater Field Study of the Elbow and Bow rivers.

The committee will continue to meet three to four times annually. The committee will continue to focus on its main goals: raising awareness of stewardship efforts, watershed education and field programs, efforts related to subbasin State of the Watershed reporting, and connecting with industry to secure project funding and expert support.

The Last Word ...

Wow – another year has flown by! It has been great to reconnect with so many of you over the past year as the organization has been able to hold several successful, in-person events. We continue to work with new tools to enable our membership to connect remotely and build on learned experiences through the pandemic.

Last year's Annual General Meeting at the Stampede grounds was an enjoyable day for all attendees. Speakers continued with the tradition of timely and interesting presentations, and we had spectacular weather for our outdoor celebration. The forums and workshops this year were also well attended, and positive membership feedback was very encouraging for the BRBC staff who put significant energy and care into these events. I would like to thank those who volunteered their time to come and present, and the participants for making these events something to look forward to. I become a little more knowledgable after each one.

Your committees have kept busy moving forward on several initiatives that will help the BRBC and the watershed both now and into future. The Science Committee has been working with students on their capstone undergraduate projects and is also developing a climate chapter for the our State of the Watershed Report (with support from the Adaptation Resilience Training Program). As well, the Committee delivered a very successful Science Forum and continues work on many other initiatives.

In our continued support for our stewardship group partners, the Watershed Stewardship Coordinating Committee has helped create a new BRBC staff position. This position, which we welcomed Joe Fowler to April, will support work such as the Elbow River Watershed Partnership's Field School with room to provide further support to other groups as needed. We hope that this position will help these essential groups in their watershed work.

The Stakeholder Engagement Committee has been working on new education and communication strategies to enhance our community connections in the watershed. Part of this involves identifying a new committee name in the upcoming months.

The Legislation and Policy Committee hosted a successful drought workshop, stimulating several questions and discussion opportunities that helped warm us all up in the frigid temperatures we experienced that day.

The Youth and Young Professionals Committee has kept their momentum going. With the support of MAGNA Engineering Services, they organized several site visits of stormwater and LID installations in the Calgary area. Aiden Yakymyshyn, our 2022 summer student, put together an excellent online storymap of this initiative, which I encourage you to learn more about at <u>this link</u>. A great day was also planned and implemented with CPAWS, where around 15 people joined together



View at Vermilion Lakes, Banff. Photo: Andrea Czarnecki

for an educational snowshoe/ shoes-with-spikes walk around Brown-Lowery Provincial Park.

Please consider joining a committee. To learn more, please contact <u>BRBC staff</u> or your fellow members.

We continue to develop the State of the Watershed Report and have moved into the phase of working with sub-watersheds in the basin. This collaboration will not only highlight sub-watershed conditions but also the great work of our members and partners in our shared efforts to ensure that the Bow is one of the best managed watersheds in the world.

I want to thank the staff – Medini, Brooke, and Joe – for always ensuring the organization is efficient, organized and a joy for members to participate in. A big thank you goes to our term staff, Alesia and Alejandro, as well as our communications contractor, Andrea, for continuing to help us get information out to our membership. The BRBC has greatly benefited from your passion and dedication.

> – Mike Murray BRBC Executive Director

Financial Statements



The Bow River Basin Council Society incorporated under the Societies Act of Alberta Statement of Financial Position for the Year Ended March 31, 2023

All values are \$CDN. Please refer to the March 31, 2023 Auditor's Report for official financial statements.

ASSETS

CURRENT					
	Operating Fund 2023	Casino Fund 2023	Operating Reserve 2023	2023	2022
Operating cash	\$795,522	\$4,265	-	\$799,787	\$741,676
Accounts receivable	11,110	79,593	-	90,703	12,259
Due from casino fund	20,406	-	-	20,406	5,974
Prepaid expenses	3,872	_	-	3,872	-
	830,910	83,858	-	914,768	
LONG TERM INVESTMENTS	271,002	-	976,986	1,247,988	1,238,551
	\$1,101,912	\$83,858	\$976,986	\$2,162,756	1,998,460
LIABILITIES & NET	ASSETS				
CURRENT					
Accounts payable	\$3,125	-	-	\$3,125	\$3,125
Due to operating fund	-	20,406	-	20,406	5,287
	3,125	20,406	_	23,531	8,412
NET ASSETS					
	1,098,787	63,452	976,986	2,129,225	1,990,048
	\$1,101,912	\$83,858	\$976,986	\$2,162,756	\$1,998,460

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The BRBC gratefully acknowledges and thanks the following supporters

Sustaining Partners

(3 years or more of consecutive support)

Alberta Irrigation Districts Association **Bow River Irrigation District City of Brooks** City of Calgary County of Newell David Swann Eastern Irrigation District **Executive Director Glacier Legacy Funds Foothills County** Government of Alberta **Heather Sinton** John Groeneveld Judy Stewart Mark Bennett MD of Bighorn

Perlette Fund Rob Wolfe Sandra Stead **Steve Meadows** Suzanne Oel Town of Banff Town of Black Diamond Town of Canmore Town of Cochrane Town of Okotoks Town of Vauxhall **TransAlta Generation** Partnership **Urban Systems** Western Irrigation District Wheatland County Wolf Keller

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- Medini Prasai Megan Van Ham Mike Murray Rocky View County Stacey Rector Stella Reisen Susan Ryan Wendell Koning Wendy Kurchak

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