

ALBERTA WATER COUNCIL

MEETING #68 February 20, 2025 Calgary Water Centre, Calgary

Executive Summary

The board received a presentation from Nancy Mackay and Megan Van Ham on the City of Calgary's drought response plan and preparedness, their response to the 2024 water shortages, and the feedermain break they experienced in June. It included a description of their communications efforts and the tools and resources they used to reduce the City's water use during the summer and fall that year to mitigate the shortages caused by the feedermain break and drought conditions.

Jaclyn Schmidt of Alberta Environment and Protected Areas provided an update on the status of the GoA water availability engagement. The initial phase of gathering feedback from Albertans is largely complete, and GoA is now reviewing and sorting the responses. They will provide updates on progress during board meetings, but up-to-date information is available on the GoA water availability engagement website.

Most of the meeting was dedicated to reviewing potential projects and selecting high priority items to further refine. The potential projects were from various sources, including previous and current AWC projects (e.g., Alberta Water Futures, *Water for Life* Implementation Review), issues discussed at board meetings, and the ideas generated as part of the business planning workshop that was held before the board meeting on February 19 and 20. Seven project ideas were selected to develop statements of opportunity (SoOs) through ad hoc groups. There will be a short call for members period to identify any additional volunteers for the ad hoc groups following the board meeting. The SoOs will be provided to the board for consideration and decision at the next board meeting.

The next board meeting will be held on June 12, 2025, at the QEII Building in Edmonton. Remote attendance via MS Teams will be available.

Summary of Discussion

Board meeting convened at 12:30 p.m.

1 City of Calgary 2024 Drought Readiness and Feedermain Response

Nancy Mackay and Megan Van Ham from the City of Calgary presented over lunch on the City's drought response plan and preparedness, their response to the 2024 water shortages, and the feedermain break they experienced in June. Monica Bramley and Sarah Smith, also from the City of Calgary, joined the meeting to answer any questions from board members.

The presentation included information on the following topics:

- The aftermath of the June 5, 2024, feedermain break, including emergency operations from the City, its impact on the City's reservoirs, details about the repair efforts, and their communication with businesses and city residents throughout. The breakage and repair also led them to identify other sections of the pipe that needed immediate repairs, which extended the length of time where significant water use reduction was needed. The feedermain did not fully come back online until November 2024.
- The principles and goals of the City's drought preparedness and response. Prior to the feedermain break, the City's focus was on drought preparedness and response, as it is in a drought-prone region and drought risk was high in early 2024. Their drought and water shortage principles are to prioritize: 1) safety and human health, 2) the shared responsibility of drought, 3) economic sustainability, 4) transparency, and 5) precautionary water stewardship. The goals of their drought response plan are to reduce water demand, protect the water supply, be prepared for drought, maintain healthy landscapes, and build and maintain strong relationships.
- A summary of city operations changes to reduce water demand (e.g., use of non-potable
 water supplies, adjusting water schedules, turning off water features), outdoor water use
 restrictions, voluntary indoor water restrictions, and communications with city residents
 and businesses about methods to reduce water consumption.
- The tools the City used to communicate the status of water use and availability internally and with the public, including the Water Demand Dashboard hosted on www.calgary.ca.

Discussion:

- Q: The Water Sharing MoU the City of Calgary signed but that was not activated had a 5-10% water use reduction goal. How would you have met that goal, if it was activated?
 - A: Education was the first tool. We would have asked for voluntary restrictions and then would have moved into outdoor water restrictions. We did some modelling, and based on the results, those two measures would have achieved the 5-10% water use reduction.
- Q: You said there was a lot of social media misinformation. Can you elaborate on that?
 - A: There were many instances. Once example was people on social media who were telling the City's engineering team how to fix the issue. It was not all directed at the City. Some industries who were continuing to use water during the shortage were targeted on social media, by people who didn't understand the complexities of the situation and who were latching onto things that are publicly visible.
- Q: What was the "biggest bang for your buck" in terms of water use reductions? Who carried the load?

- o A: Everyone carried the load. Every drop counts because the largest water use is residential; the biggest impact is everyone using a little less water in their day-to-day life. Industrial and commercial water uses are important, but some of those uses are difficult to reduce. For example, hospitals can't stop washing linens.
- There was a lot of collaboration that made the pipe repair happen, for example the City of San Diego that gave up a critical spare. It is a good news story, and those connections are very important. They took on a risk by giving Calgary a critical part.
- The timing of the pipe failure was fortunate for Calgary. Since it was during the summer, the reduction in consumption could come from outdoor water use savings. Edmonton had a failure in winter 2024 and didn't have that option.

2 Administration and Information Reports

Andre Asselin chaired the meeting and reviewed the agenda. The agenda was adopted by consensus as written.

Andre noted that long-time board member, Maureen Bell, who represented one of the Environmental seats on behalf of the Water Conservation Trust of Canada, has stepped down from the board and will be invited to the annual recognition event in October. The board thanked Maureen for her service in her absence.

Decision 68.1: The board approved the agenda by consensus.

2.1 Approve summary report from the October 24, 2024, board meeting

Clarifying edits to the October 2024 meeting summary were submitted to staff and incorporated into the document. There were no further questions or comments, and the meeting summary was approved by consensus.

Decision 68.2: The board approved the October 2024 meeting summary by consensus, and it will be posted to the website.

2.2 Review actions from last meeting

A detailed update on the action items from the October board meeting was provided in the briefing package.

2.3 Announce New President

Following the departure of President and Deputy Minister of EPA, Sherri Wilson, from the board, Assistant Deputy Minister Kate Rich was appointed to represent Environment and Protected Areas on the board and the GoA and Provincial Authorities sector group on the executive committee. The executive committee selected Kate Rich as the new President of the AWC. The board congratulated and welcomed Kate in her new roles in her absence.

2.4 Executive Director's Report

The report was included in the briefing package. There were no comments or questions.

2.5 AWC Sector Updates (Including the GoA Update)

The update was included in the briefing package and was also posted to the board's SharePoint site. The GoA's update was provided to board members separately via email.

Jay White noted that he had participated in the recent provincial Aquatic Invasive Species (AIS) Task Force. The report was released in December 2024 and contains several recommendations. He participated as an independent subject matter expert and not on behalf of the AWC although the report lists his affiliation as being the VP (NGO) of the AWC,

Discussion:

- Q: The report from the AIS Task Force is very focused on GoA actions. Did the Task Force talk about the partnership aspect of prevention of AIS?
 - o **A:** The Task Force was focused on providing advice to the Minister and what the GoA can do around AIS. There were only four two-hour meetings; it had an accelerated timeline and very specifically targeted.
- When the AIS Task Force was originally stood up, it included an element of communication that didn't wasn't reflected in the report. It's an oversight and it would have been nice to see a recommendation related to two-way communication.

Action 68.1: Andre to send the report from the Aquatic Invasive Species Task Force to the board.

2.6 Source Water Protection Phase 1: Risk Assessment Data and Tools Project Team Update

An information report on the project team was included in the briefing package. There were no comments or questions.

2.7 Improving Water Availability in Alberta Working Group Update

An information report on the working group was included in the briefing package. The group is on pause pending the results of the water availability engagement being completed by GoA. There were no questions or comments.

2.8 Water Conservation, Efficiency, and Productivity Sector Reporting Initiative Update

An update on the water conservation, efficiency, and productivity 2023 update report was providing in the briefing package. There were no questions or comments.

2.9 Water for Life Action Plan Project Update

An update on the project team and its final report was provided in the briefing package. The final report has been complete and was distributed to board members, but it is an internal AWC document and will not be publicly released. There were no questions or comments.

2.10 CASA Project Updates for the AWC Board

An update on the status of CASA's projects was provided in the briefing package. There were no questions or comments.

3 Water Availability Engagement Update from GoA

Jaclyn Schmidt, Executive Director of Water Availability and Partnerships of Alberta Environment and Protected Areas, gave an update on the status of the GoA's water availability

engagement that began in late 2024 and is ongoing. The update included the following information:

- This first phase of engagement is about idea generation and collation. It is an acknowledgement that water management is a shared responsibility; the GoA is interested in hearing about water needs and innovations from Albertans who are using and managing water on the ground.
- The GoA provided some water management information sheets that covered known issues from the past decade to help generate conversation and determine whether those topics are still high priority. They included topics such as measurement and reporting of water use, enhancing water conservation, efficiency, and productivity, alternative sources of water, rainwater use and management, inter-basin transfers, and others.
- The ideas brought forward included feedback on the issues sheets as well as a wide variety of other topics that covered a spectrum of types and management levels from province-wide ideas to regional or local issues. GoA staff are going through and reviewing the submissions before preparing them to be brought forward to decision-makers in the GoA.
- The senior priority principles of First in time, first in right and specific allocations were not within the scope of the engagement.
- The Minister's messaging included that there was no intent to favour one industry or water use over others, and that *Water for Life* is not being changed. There was also acknowledgement that water needs to be managed to meet the needs of communities, the economy, and the environment, as well as for traditional uses.
- The engagement survey officially closed on January 24, but the engagement period was extended to accommodate some additional sessions, and feedback is still being accepted. In addition to the survey, feedback was collected through webinars, in-person open house and townhall meetings, idea boards online, email, and individual meetings with specific sectors or groups of organizations.
- Review of the submitted feedback is underway. The open-ended nature of the
 engagement meant that it covers a wide variety of topics that are relevant to different
 ministries; very few ideas being exclusively owned by one department or another. Initial
 steps of the review will include summarising major feedback areas into themes and
 identifying potential actions.
- As this was an initial idea generation phase, if any areas are selected for action that involve policy change or development of tools, there will be additional engagement on those pieces. This initial phase serves to help identify where GoA should prioritize time, effort, and resources.

The GoA will provide updates on the status of the engagement at board meetings, but up-to-date information is available on the GoA's website for the engagement: https://www.alberta.ca/water-availability-engagement.

Discussion:

- **Q:** How will the GoA report back to Albertans on what they heard?
 - o A: That decision hasn't been made yet; once the Ministers determine what information will be communicated and how it will be packaged then they will decide how to communicate it as well.
- **O:** Is there a timeline for when the results will be available?
 - o A: Not yet. There is a lot of feedback to go through.

- **Q:** How many responses did you get?
 - o A: The feedback was given in different formats, so it makes it difficult to guess the total number, but it is on the order of thousands.
- Q: Has the Minister committed to managing to the capacity of individual basins?
 - o A: It wasn't specifically included in her public remarks. There was an issues sheet on inter-basin transfers.
- This was a very interesting consultation. There aren't a lot of people who can read through all of the feedback and get their head around the complexity. It will be complicated for the GoA to interact with broad sectors of Albertans on these issues.
 - The GoA is truly interested in hearing from Albertans, and it was tough to find a balance between providing information without steering the ideas and opportunities and challenges. The GoA is used to engagement where there is already an idea, which wasn't the approach here. It was challenging to navigate.
- Q: Because the engagement was open-ended, did some of the feedback challenge the pieces that were identified as out of scope?
 - o A: Yes, some of the feedback was on items that were out of scope. For example, FITFIR was out of scope, but some people submitted ideas around it.
- It would be valuable for the AWC to provide a space where members can share the input they submitted during the engagement.
 - o Many sectors submitted letters that included a link to where they've published their feedback.

4 Project Identification Session

4.1 Background & Session Instructions

Andre provided some information on the potential project ideas the board will be considering during the session and explained the steps the participants would use to refine the list and identify the projects the board will move forward.

Participants were seated in breakout groups, and each group was given a list of five projects from the list of project ideas that came from previous AWC work or board discussions. The list did not include the new ideas from the business planning workshop. Each group was asked to consider these projects in light of the project selection criteria discussed during the business planning workshop and identify one or two projects out of the five which should be progressed. Each group would then report their discussion and outcomes in plenary.

Following the discussion of these existing project ideas, a second exercise was completed for the new initiatives from the business planning workshop. For this one, the new initiatives were given a station, and participants were asked to visit the station of the projects that most interested them and flesh out the idea a bit further. Any of the new ideas which were not visited and discussed by participants during the exercise would be removed from the short list.

Lastly, the participants were asked to complete a dotmocracy on the shortlist of ideas identified through the previous two exercises. Each sector was given three dots, each signifying a different number of points. The shortlisted projects were on a whiteboard, and they were asked to place the dots on the three projects they would most like to progress, with higher points indicating higher priority. The projects which received the highest number of points would then be selected for development of Statements of Opportunity.

4.2 Elimination and Sorting Exercise

The discussion and results of the first exercise on the existing project ideas from previous and current AWC work and board discussions is summarized below.

Plenary Discussion:

- There's a lot of information and data across sectors related to a potential project coming out of the Alberta Water Futures Project on optimizing our ability to monitor, evaluate, and report on environmental, social, and economic conditions and improve accessibility. One of our strengths is our ability to provide a platform for information sharing.
- The drought work was valuable, and updating the drought resiliency guide should be a priority since it's timely, builds on our previous successes, and leverages our membership.
 - o This is critical. The guide was heavily used last year, and we should make it as easy as possible for municipalities with limited capacity to respond to drought.
 - The WPACs invested a lot of unplanned resources into hosting the workshops, which is something to consider in terms of delivery and execution
 - O This project would be well timed, as our experience with the recent drought is still fresh.
- It isn't the right time to restart the Improving Water Availability Working Group given we don't have results from the GoA's engagement yet.
 - We should retain some capacity for this so we can pivot to it if we need to be engaged.
 - In the past we have successfully dealt with emerging issues; we can make room for this if it becomes a priority.
- The project from Water Futures on foresight is too general and nebulous to identify a concrete project scope.
- It's unclear how the AWC can move healthy aquatic ecosystems forward at this time.
 - The healthy aquatic ecosystem project ideas are big, and not well defined enough.
- The recommendation from the last *Water for Life* Implementation Review to promote flood and drought management and improve community preparedness can encompass a variety of projects and is tied into things like infrastructure, both natural and engineered.
- Projects around water literacy, education, and outreach may not be within the AWC's scope, depending on the framing of the project.
- The potential project from Water Futures on planning is very broad, and it's not clear what a project under that theme would look like.
- There is an opportunity to do a new threat assessment aquatic invasive species as new threats have arisen since the last assessment was done, and there are new vectors. In recent years, the vectors from eastern Canada are more significant and have more risk than those coming from across the border. Threats from the US were the primary focus in the previous work.

The shortlisted projects from this exercise were:

• Update the Drought Resiliency Guide – Provide updates to the Building Drought Resilience in Alberta Guide based on lessons learned from the recent drought, include new resources, and update any resources that have changed.

- Water for Life Implementation Review: Preparedness Promote flood and drought management and to develop planning, best practices, and other informative user-friendly tools to improve community preparedness.
- Aquatic Invasive Species Threat Assessment & Program Review Determine the need for an updated threat assessment that includes new species, new transportation corridors, and availability of mitigation measures.
- Water Futures: Knowledge Optimize our ability to monitor, evaluate, and report on environmental, social, and economic conditions, and improve accessibility to this information.

4.3 New Projects Discussion

The goal of this exercise was to discuss the ideas generated during the business planning workshop and focus their scope down to a manageable level for a project, then select the higher priority items to add to the list of projects from the previous exercise. Discussions on each project area are summarized below, along with the shortlist of projects for the dotmocracy.

<u>Host a Forum on Applications of Artificial Intelligence (AI) and Data Transformation to Water Management</u>

- This is a good opportunity for the Council. AI is already starting to show up and will become a big part of water management in the future. There are a lot of groups who are not aware of it or who works in this space. Water resiliency or availability lenses can also be applied to this.
- An initial step is data sharing to raise the cross-sector understanding on this topic and identifying opportunities or gaps that can be pursued in additional projects.
- This would be more accurate if renamed to focus on cross-sector technology education and planning.

Healthy Aquatic Ecosystems

• This topic has been a stumbling block over the years. An SoO already exists for this area of interest, but it is very broad as currently written. A small first step is necessary, and it needs to be a well-considered, narrow scope project.

Community of Practice on Full Cost Accounting and Asset Management

- This is another topic where an information gathering first step would be beneficial. An in-house forum for AWC members to share experiences, discuss the pros and cons, and share trials and tribulations for those who manage water infrastructure.
 - o This is a broad topic; this first step will help identify potential future projects.
- Small and Rural Municipalities aren't represented here today but would likely be interested in this project.

Non-Regulatory Actionable Opportunities for Water Availability

- The "non-regulatory" aspect of this was controversial and limiting.
- A project opportunity here is that, recognizing industrial and economic growth, exploring under tapped or untapped alternative water supplies like groundwater, interbasin transfer, and other innovative ideas.
 - o Alternative water supplies, rather than water uses.
 - It could be scenario based. For example, what happens if a town's water supply is a river that dries up?

Identifying Opportunities for Cross-Sector Water Reuse

• There's a lot of research happening in this area. There are a lot of examples of opportunities and challenges. Sharing information and experiences on this topic is a great place to start, and several sectors could be involved.

Evaluating the Water License Transfer System

- There are rules in place to have a water transfer system, but it is not being embraced as much as it could be.
 - A simple forum on the challenges and opportunities in this system could be a good starting point. It should include lived experiences and case studies.

Promote and Develop Cross-Sector Definitions for Water Metrics

• This initiative would meet the criteria for an AWC project, but it might not be the top priority. It could be a sub-task under something like water literacy. It is valuable, but more from a communication perspective than a reporting or regulatory perspective.

Identify Gaps in Water Literacy

- A project could be a look at the original water literacy program to identify gaps and revise or retool it, rather than creating communication tools themselves.
 - o A review of the AWC's project on water literacy should be the focus, but it should also include the GoA's environmental education framework.
- A notable gap here is adult education.

Participants did not visit the station for the initiative on identifying nature-based solutions and future opportunities, so there was no discussion, and this idea was not included in the shortlist. All other new project initiatives were brought forward for inclusion in the dotmocracy exercise.

4.4 Dotmocracy Results & Next Steps

Participants completed the dotmocracy exercise and the top seven project ideas were selected to develop Statements of Opportunity through ad hoc groups. The project ideas and the volunteers for each ad hoc group were as follows:

- Facilitating Cross-Sector Technology Education and Planning
 - o Dan Moore, Industry Forestry
 - o Nancy Mackay, Government Large Urban
 - o Vicki Lightbown, GoA and Provincial Authorities Alberta Innovates
- Identifying Opportunities for Cross-Sector Water Reuse
 - o Nancy Mackay, Government Large Urban
 - o Vicki Lightbown, GoA and Provincial Authorities Alberta Innovates
- Healthy Aquatic Ecosystems
 - o Jay White, NGO Environmental
 - o Lesley Person, NGO Fish Habitat Conservation
 - o Tracy Scott, NGO Wetlands Conservation
- Evaluating the Water License Transfer System
 - o Margo Jarvis Redelback, Industry Irrigation
 - o Megan Van Ham, Government Large Urban

- Form a Community of Practice for Full Cost Accounting and Asset Management
 - o Alan Corbett, NGO WPACs
 - o Deanna Cottrell, Industry Oil & Gas
 - o Margo Jarvis Redelback, Industry Irrigation
- Exploring Untapped and Under-Tapped Alternative Water Supplies
 - o Rob Hoffman, Industry Chemical and Petrochemical
 - o Rob Van Diemen, Industry Livestock
 - o Tara Payment, Industry Oil & Gas
- Update the Drought Resiliency Guide
 - o No volunteers identified at the time, though the WPACs collectively supported this existing SoO very recently in advance of the workshop.

Not all sector representatives were in attendance, so following the meeting there will be a brief call for members period for the ad hoc groups in case there are any additional volunteers. The ad hoc groups will then begin development of Statements of Opportunity for consideration during the June board meeting.

For the project to update the drought resiliency guide, a Statement of Opportunity has already been developed and if there are no additional volunteers it will go ahead to the board as currently written and proposed by the WPACs.

Action 68.2: AWC Staff to distribute a call for members for the ad hoc groups to determine if there are any additional volunteers prior to them beginning work on drafting Statements of Opportunity.

New or other business

No new business was identified.

An evaluation survey will be sent to board members following the meeting.

The next board meeting is scheduled for June 12, 2025, at the QEII Building in Edmonton. There will be an option for board members to attend virtually via MS Teams.

The board meeting adjourned at 3:29 p.m.

Attachment 1: Meeting #68 Attendees

In Attendance

AWC Directors and Alternates

Alan Corbett, NGO (WPACs)
Cindy Shepel, Government (Large Urban)
Dan Moore, Industry (Forestry)
Deanna Cottrell, Industry (Oil & Gas)
Doug Kaupp, NGO (WPACs)
Jaclyn Schmidt, GoA and Provincial Authorities
(Alberta Environment and Protected Areas)
Jamie Wuite, GoA and Provincial Authorities
(Alberta Agriculture and Irrigation)
Jason Unger, NGO (Environmental)
Jay White, NGO (Lake Environment
Conservation)

Lesley Peterson, NGO (Fisheries Habitat
Conservation)
Margo Jarvis Redelback, Industry (Irrigation)
Nancy Mackay, Government (Large Urban)
Rob Hoffman, Industry (Chemical and
Petrochemical)
Rob van Diemen, Industry (Livestock)
Tracy Scott, NGO (Wetlands Conservation)
Vicki Lightbown, GoA and Provincial
Authorities (Science and Research)
Andre Asselin, Executive Director (exofficio)

Guests:

Megan Van Ham, City of Calgary

Presenters:

Megan Van Ham and Nancy Mackay, City of Calgary (Item 1.0) Jaclyn Schmidt, Alberta Environment and Protected Areas (Item 3.0) Andre Asselin, Alberta Water Council (Item 4.0)

Observers:

Monica Bramley, City of Calgary Sarah Smith, City of Calgary

AWC Staff:

Alec Carrigy, Anuja Hoddinott, Claire Poirier, Katie Duffett

Absent with Regrets:

Amber Link, Government (Rural)
Bill Chapman, Government (Small Urban)
Brian Deheer, NGO (Environmental)
Darren Calliou, Government (Métis Settlements)
Janice Linehan, Industry (Mining)
Jeanette Sarac, GoA and Provincial Authorities (Health)
John Conrad, GoA and Provincial Authorities (Alberta Agriculture and Irrigation)
Kate Rich, GoA and Provincial Authorities (Environment and Protected Areas)
Nevin Rosaasen, Industry (Cropping)

Attachment 2: Meeting #68 Decision Log and Action Items

Decisions

Decision 68.1: The board approved the agenda by consensus.

Decision 68.2: The board approved the October 2024 meeting summary by consensus, and it will be posted to the website.

Action Items

Action 68.1: Andre to send the report from the Aquatic Invasive Species Task Force to the board.

Action 68.2: AWC Staff to distribute a call for members for the ad hoc groups to determine if there are any additional volunteers prior to them beginning work on drafting Statements of Opportunity.