

# ALBERTA WATER COUNCIL

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MEETING #50

February 28, 2019

Government House, Edmonton, Alberta

## Executive Summary

The board made several administrative decisions, agreeing to:

- Update the AWC Communications Strategy for 2020-2022 according to the process proposed by the executive committee
- Make decisions by email when expedited approval is required to respond on high priority work
- Use new proposed performance measures in accordance with the new AWC Business Plan

Updates were provided on two projects. The Protecting Sources of Drinking Water in Alberta Project Team continues to make good progress and described some of the key findings to date from its own work and from the consultant's jurisdictional scan. The team is of the view that a Phase II for this work would maintain momentum and offer support and tools to groups that want to do source water protecting plans in Alberta. The Building Resiliency to Multi-Year Drought team is also on track, having completed three of its four objectives. Plans are underway for a workshop this spring to pilot the draft drought management guide and toolkit in partnership with one Watershed Planning and Advisory Council.

The board also received an update on the AWC's recommendation tracking system. Updates were provided this year on 15 AWC projects, ten of which are closed or fully implemented. Close to 75% of the recommendations were categorized as implemented or closed, and further updates on these will not be requested; 26% are pending; and 2% are partially implemented. The rationale for the categorization is shown in the Detailed Report. Both the Update Report and the Detailed Report are available on the AWC website.

As the AWC will have capacity to begin a new project later this year, the board spent time considering topics for future work. Four potential topics were identified and staff will work with board members to further develop these ideas.

Dr. Uldis Silins from the University of Alberta gave a very timely presentation on the leading-edge work being done by a trans-disciplinary team to look at the effects of wildfire on Alberta's water supplies. Michael Sullivan, provincial fish science specialist, described the fishery policy priorities in Alberta and work being done to protect and restore the province's fisheries.

## Summary of Discussion

Jay White convened the board meeting at 9:05 a.m. He acknowledged this meeting is being held on the traditional lands of Treaty 6 First Nations and Métis peoples, and thanked the Government of Alberta for the use of this venue.

### 1 Administration

#### 1.1 Welcome, Review Health and Safety, Approve Agenda

The Chair reviewed logistics and safety procedures for the venue. Those present introduced themselves. Jay reviewed the agenda, which was adopted.

#### 1.2 Action Items from Last Meeting

There were no administrative action items from the last meeting.

#### 1.3 Summary Report from November 8, 2018 Meeting

The summary report was approved by consensus.

*Decision 50.1: The summary report for the November 8, 2018 meeting was adopted by consensus and will be posted to the website.*

#### 1.4 Process to Update the Next Multi-Year Communications Strategy

The executive committee oversees the updating of the three-year communications strategy and asked the board to approve the process as proposed in the briefing package. The overall intent is to continue the current approach to AWC communications, but to also take a more thorough look at what others are doing and their successes.

*Decision 50.2: The board approved the proposed process to update the Communications Strategy for 2020-2022.*

#### 1.5 Making Board Decisions Electronically

Being able to make certain decisions electronically outside of regularly scheduled board meetings will enable the board to be more responsive to emerging member needs. This would only be done in the case of high-priority requests with very tight timelines, such as a request from the minister. To date, the AWC has not had to turn away such work, but it would be helpful to say that AWC has a more expedited approach if the situation arises. The executive director would be in contact with each board member and if a fuller board discussion is needed, a teleconference can be arranged.

*Decision 50.3: The board approved making decisions by email when expedited approval is required to respond on high-priority work.*

### 2 Protecting Sources of Drinking Water in Alberta Project Team Update

Mike Christensen and Phil Boehme provided an update on the work of the Protecting Sources of Drinking Water in Alberta project team. They reviewed the concept of source water protection (SWP) and summarized the history of the team, its objectives, and progress to date, including a consultant's review of what other select jurisdictions have done. The

jurisdictional scan is complete and findings will inform the Guidance Document and the team's final report. The cost to treat drinking water is a common driver for SWP and drinking water providers typically lead SWP planning efforts. Other key conclusions are that:

- Collaboration among stakeholders is important and requires improvement.
- Clearly defined leadership, responsibilities, and roles of government and stakeholders are critical.
- Financial assistance, technical and personnel resources, and centralized tools strongly encourage SWP activities, even when they are voluntary.
- Implementation of SWP on private land is challenging but can be overcome by integrating SWP into stewardship initiatives.

The Guidance Document is being prepared and will include both best practices and key factors for success. The companion final report will also include lessons learned and other more detailed content. The team is of the view that a Phase II for this work would maintain momentum and offer support and tools to groups that want to do SWP plans in Alberta.

### Discussion

- The Water North Coalition would be a potential customer for this work.
- Looking at SWP broadly, how does this differ from the land use planning work underway in Alberta? Drinking water protection plans recognize threats to drinking water and seek to address those activities. Will Alberta focus on public or private operators to ensure the system has the appropriate tools at the local level or higher? In Alberta, we don't always look at the source.
  - The two processes are different with different layers. We see SWP plans nested more at the local level where there are water treatment systems and people want to look beyond their boundaries, recognizing that jurisdictions don't control things outside those boundaries. We are focused first at the local level, but there is a collaborative aspect. The big part is the systems component, but we also need to look at the source. This may not be a full land use planning exercise but, to mitigate risks, we need to understand elements beyond the actual physical system.
- Intermunicipal development plans (IDPs) and related discussions are underway now. Municipalities manage land adjacent to source water and we need to make sure IDP activities are thorough; there may be opportunities to do more.
- One challenge for government is translating IDPs to area structure plans to enable assessment of threats.
- What is the team doing to ensure good uptake of its work and reach logical partners to champion the results?
  - Some team members have been involved in doing SWP plans and we are looking to collaborate actively with them as well as seeking other partners. This would be a crucial part of a Phase II.
- What is the intent of the Guidance Document and what will it propose?
  - We have focused on what the consultant provided based on the wide scope of what other jurisdictions have done. Some jurisdictions have taken a top down approach while others chose to work from the bottom up. We will share those learnings but may need to do more work to communicate our focus.
- We have identified a lot of governance challenges related to source water and drinking water supplies. I would caution the team to use this work as a bridging

activity on how to manage a threat for those who provide drinking water, noting that more work is needed on SWP.

- Politicians don't like to be told what to do. Collaboration can occur, but we need to be careful with language as there are lots of trigger words that can be interpreted differently.
- Is fire built into the risk matrix?
  - Yes, fire and floods seem to be causing more risk challenges.

### **3 Building Resiliency to Multi-Year Drought Project Update**

Margo Redelback presented an update on the progress and findings of the team. The team is now documenting information and resources related to drought in Alberta with the intent of creating a toolkit to help WPACs empower municipalities to undertake activities that contribute to drought resiliency. The first three objectives have been completed and the team is now focused on objective 4 related to the guide. Drought management strategies are being organized into 12 different themes with best practices and case studies as practical examples. A draft of the guide has been completed, and the team is developing plans for a pilot workshop to deliver it to a WPAC and its associated municipalities. Feedback will be incorporated into the guide and tools. The draft guide and results from the workshop will be presented at the June board meeting. Most WPACs indicated an interest in participating when the call went out, so the team is narrowing down options with the aim of choosing one that is representative of the entire province to get the best feedback. The intent is to have WPACs facilitate in their area as they will know what those municipalities need. The toolkit should be something that municipalities can work through on their own to develop a drought plan.

During discussion, it was suggested that local politicians also be invited to the workshop.

### **4 Performance Measures**

Following approval of a new three-year business plan in 2018, the executive committee proposed that the performance measures and targets be adjusted to reflect changes to the goal statements in the new plan, as described in the briefing package.

***Decision 50.4: The board approved the proposed performance measures for the new AWC Business Plan.***

### **5 Recommendation Tracking**

Cara McInnis presented the annual update on the implementation status of AWC recommendations. Sectors that are identified as the implementers provide updates to staff on the status of recommendations being tracked. This information populates the Detailed Report, which show updates for each project, and the higher-level Update Report, both of which are posted online. The Update Report was provided to the board prior to the meeting. It synthesizes updates from 15 AWC projects; ten projects are closed or fully implemented. Close to 75% of the recommendations were categorized as implemented or closed, and further updates on these will not be requested; 26% are pending; and 2% are partially implemented. The rationale for the categorization is shown in the Detailed Report, along with some explanations of how the landscape has changed and how that may have influenced implementation.

## Discussion

- In future, it would be good to show recommendations that move from one stage to another so we can better understand how many are being addressed.
- I remain concerned about some of this, for example, characterizing the wetland policy work as implemented.
- When something is labelled “closed” it doesn’t necessarily mean we’ve dealt with the issues. Interpretations of the word “closed” might differ.
  - It is challenging to track all the recommendations and provide information in a way that is relevant and easily consumable, and the differences between “closed” and “implemented” are one example. If one sector viewed implementation as “pending” and another said “closed”, as happened with the CEP sectors, staff marked it as “pending.”
- This seems like a complex process with a lot of supporting documentation. How does it tie into the new *Water for Life* Implementation Review (WFLIR) process?
  - The detailed report approach arose from the business planning work in 2010, but then evolved into a standalone piece. There is no evaluation component, and implementation reflects activity of others, not the AWC. Many early recommendations did not have an associated timeline so we had to determine when to stop reporting on them, which is partly why the new system was developed. The new WFLIR work will not likely look at recommendation tracking, but it could.

## **6 Presentation on Effects of Wildfire on Alberta’s Water Supplies**

This presentation by Dr. Uldis Silins, Professor of Agricultural, Life and Environmental Sciences at the University of Alberta looked at the effects of wildfire on Alberta’s water supplies as part of the Southern Rockies Watershed Project. The main goal of the project is to develop a better understanding of connections between the climatic, hydrological, and ecological factors regulating this key headwater landscape and to link this information with the condition of downstream water resources at larger basin scales. Research by a trans-disciplinary team has examined the impact of loss of tree canopy on the interception of snow and rainfall, and other impacts of fire on water temperature, nitrogen, phosphorus, carbon, and sediment. Fires lead to more rapidly fluctuating water quality, which creates more challenges and costs for drinking water treatment, and some of these effects can persist for more than a decade. Climate change is leading to more weeks each year with very severe weather conditions, which makes most of Alberta’s utilities that supply drinking water more vulnerable. Some work is also looking at potential mitigation through forest harvesting practices, but that research has not yet been published.

## Discussion

*Q: Your analysis of the number of affected water treatment facilities and their populations in Alberta is quite revealing.*

*A: We looked at 94 surface water utilities that draw water partly or entirely from forested regions, and the communities vary in size from large to very small. Technological infrastructure mitigation options are not open to all of them due to their population size, and the required infrastructure does not scale to population, as a minimum is needed even for very small treatment facilities. For the most part, water can be treated but it comes down to the cost. Some of this work will be published soon.*

*Q: A lot of water in the Grande Prairie area comes from BC. Are you doing any riparian work?*

A: Riparian management guidelines have not changed much over time. What has changed is the broad suite of management practices regarding road layout, location, etc. The judicious application of good management practices can make a difference.

**Tanya Thorn took the chair**

## **7 AWC Members' Upcoming Priorities**

AWC has capacity to start one new project by June. Some ideas emerged during the business planning exercise and, at this meeting, board members had further opportunity to propose new work. Staff compiled preliminary suggestions into several main topics, some with sub-topics, and wrote them on flip charts. These were briefly reviewed with the board and during the subsequent short discussion, a few additional topics were added. Board members were given four dots and then voted for their preferences by placing dots next to their preferred topics. The following four topics received the most votes and those who agreed or who were proposed *in absentia* to work on each topic are listed.

- Ecosystem services – Paul McLauchlin, Margo Jarvis Redelback, Brett Purdy
- Strategy to protect aquatic ecosystems – Carolyn Campbell, Holly Johnson Rattlesnake (Note: would be good to have a GoA representative too)
- Watershed monitoring, management, and sustainable funding – Jason Unger, Bob Cameron, Rick Blackwood
- Net environmental effects (water and greenhouse gas emissions) – James Guthrie, Deanna Cottrell, Rob Hoffman, Roxane Bretzlaff

Andre will follow up with the full board to move forward, and staff will work initially with the individuals noted to begin developing statements of opportunity. Statements of opportunity are also expected to come forward from other processes.

## **8 Implementing AWC's Healthy Aquatic Ecosystems Project Team Recommendations**

Michael Sullivan and Dave Stepnisky attended the meeting and Mike gave a presentation about Alberta fisheries. Alberta's fishery policy has four priorities: conservation, Indigenous, recreation, and economic elements. The intent is to apply systems thinking to fisheries monitoring and management, which includes assessing status then assessing threats. Assessments are available online at the Alberta Fisheries website. Mike showed what the distribution used to be and what it is now for various fisheries. There are different ideas about why populations have declined but a systems approach to management is showing some good results, including on treaty lands.

### Discussion

*Q: What is the demographic for the angling population?*

A: Licence sales are dropping and this is due to an aging population; those over 65 do not have to have a licence, nor do those under 16 nor Indigenous people.

*Q: How are mitigation efforts working on the Eastern Slopes?*

A: They appear better when we look at the system but there are still some issues. We are getting away from a focus on single streams, and the tone of the conversation is changing. Things are not solved yet but I think the discussion is more civil and more realistic.

*Q: Do you have a way to understand and integrate the natural capacity of a lake? If the lake is naturally poorer, can we expect the same results?*

A: Systems capacity is critical, and we do have a model to measure system capacity and what it can do.

*Q: What is the state of the commercial fishery?*

A: We closed the commercial fishery in 2014 and did not buy out licences, as most had collapsed before then anyway.

*Q: How long does it have to stay closed before we see a rebound?*

A: It depends. Some came back in three years. If the system is in bad shape due to many years of sediment input, for example, it takes a very long time to recover.

*Comment: There is a lot of science-bashing in the sport fishing industry with people saying that GoA staff don't know what they are talking about. You've done a lot of good work, but a lot more is needed in the way of education and outreach.*

A: We've had three external science reviews on the department, and some things could be improved but we need to work hard on the outreach. We wanted to make sure the science was solid before going deep into public education.

## **9 Information Reports and Questions**

Comments on GoA update

- The recent Auditor General report noted a number of unfinished recommendations and it would be nice to get an update on some of those. It was good to see the details in the update on the *Water Act* regulation, but it might have been nice to ask stakeholders what they wanted to see with these changes.

Executive Director's report

Andre added that in light of the pending election, the ability of some GoA staff to participate on teams may be limited for the election period. A letter is being prepared for new MLAs and ministers to tell them about the AWC, and that will be ready to go after the election.

## **10 New or Other Business**

There was no new or other business.

The next board meeting will be June 25 in Calgary.

The board meeting adjourned at 2:31 p.m.

## **Attachment 1: Meeting #50 Attendees**

### **AWC Directors and Alternates**

Roxane Bretzlaff, NGO (WPACs)  
Mark Brostrom, Government (Large Urban)  
Bob Cameron, NGO (Environmental)  
Carolyn Campbell, NGO (Environmental)  
Deanna Cottrell, Industry (Oil and Gas)  
James Guthrie, Industry (Mining)  
Jim Hackett, Industry (Power Generation)  
Rob Hoffman, Industry (Chemical and Petrochemical)  
Paul McLaughlin, Government (Rural)  
Dan Moore, Industry (Forestry)  
Keith Murray, Industry (Forestry)

Margo Jarvis Redelback, Industry (Irrigation)  
Tracy Scott, NGO (Wetlands)  
Tanya Thorn, Government (Small Urban)  
Jason Unger, NGO (Environmental)  
Jay White, NGO (Lake Environment Conservation)  
Jamie Wuite, GoA and Provincial Authorities (Alberta Agriculture and Forestry)  
Andre Asselin, Executive Director (ex-officio)

### **Presenters:**

Mike Christensen and Phil Boehme, *Protecting Alberta's Sources of Water* (Item 2)  
Margo Redelback, *Multi-Year Drought Resiliency* (Item 3)  
Cara McInnis, *Recommendation Tracking* (Item 5)  
Dr. Uldis Silins, *Effects of Wildfire on Alberta's Water Supplies* (Item 6)  
Michael Sullivan, *Implementing Healthy Aquatic Ecosystems Recommendations* (Item 7)

### **Guests:**

Jenna Curtis, Alberta Environment and Parks  
Holly Johnson Rattlesnake, Samson Cree Nation  
Lieserl Woods, Environment and Climate Change Canada

### **AWC Staff and Contractors:**

Katie Duffett, Christa Edwards, Cara McInnis, Anuja Ramgoolam, Kim Sanderson

### **Absent with Regrets:**

Maureen Bell, NGO (Environmental)  
Rick Blackwood, GoA and Provincial Authorities (Alberta Environment and Parks)  
Dave Burdek, GoA and Provincial Authorities (Alberta Agriculture and Forestry)  
Darren Calliou, Government (Métis Settlements)  
Silvia D'Amelio, NGO (Fisheries Habitat Conservation)  
Brett Purdy, GoA and Provincial Authorities (Alberta Innovates)  
Stephanie Clarke, GoA and Provincial Authorities (Alberta Energy)



**Attachment 2: Meeting #50 Decision Log**

*Decision 50.1: The summary report for the November 8, 2018 meeting was adopted by consensus and will be posted to the website.*

*Decision 50.2: The board approved the proposed process to update the Communications Strategy for 2020-2022.*

*Decision 50.3: The board approved making decisions by email when expedited approval is required to respond on high-priority work.*

*Decision 50.4: The board approved the proposed performance measures for the new AWC Business Plan.*

DRAFT