ALBERTA WATER COUNCIL

MEETING #52 November 8, 2019 Federal Building, Edmonton, Alberta

Executive Summary

The board welcomed Nissa Petterson as a new director for NGO (Environmental) and Mike Christensen the new alternate director for NGO (Lake Environment Conservation). The board also recognized several board members who have stepped down from the AWC board: Rick Blackwood, Bradley Peter, Cheryl Fujikawa, and Carolyn Campbell.

The board made several administrative decisions, approving:

- AWC's 2020 Core Operating Budget
- AWC's 2020 Operational Plan
- 2020 board meeting dates
- a capitalization policy with a threshold of \$3,000

Bev Yee was named the executive officer representing Government of Alberta and Provincial Authorities (GoA and PA), and Keith Murray was named the executive officer representing Industry.

The board approved the Protecting Sources of Drinking Water in Alberta Project Team's final guide, companion report, and communications plan, and disbanded the team. The Building Resilience to Multi-Year Drought in Alberta Project Team was granted an extension until June 2020 to complete its work. The *Water for Life* Implementation Review Committee provided an update on the work they have completed thus far.

The board received four information presentations:

- AEP Environmental Monitoring and Science Division presented an update on the fiveyear lotic monitoring, evaluation, and reporting lotic plan.
- AEP Wildlife Policy Division presented an update on the whirling disease program.
- AEP Wildlife Policy Division presented an update on the Aquatic Invasive Species Program.
- Ducks Unlimited Canada (DUC) provided background on its organization, current research, an overview of their conservation programs, as well as an overview of the Municipalities and Wetland Management course.

Verbal updates were provided on two potential Statements of Opportunity (SOO) which were discussed at the previous meeting. The Ad Hoc Lake Group has met, but further conversations with other stakeholders are required before a SOO can be brought to the board. A draft SOO focused on red tape reduction opportunities is being reviewed by the Industry sector and will be provided to the board for decision at a future meeting.

The next board meeting will be held on February 25, 2020 in Calgary.

Summary of Discussion

Bev Yee convened the board meeting at 9:10 a.m.

Nissa Petterson was introduced as the new director for NGO (Environmental) and Mike Christensen was introduced as the new alternate director for NGO (Lake Environment Conservation).

1 Administration

- **1.1 Welcome, Review Health and Safety, Approve Agenda** The Chair reviewed the agenda, which was adopted.
- **1.2** Action Items from Last Meeting There were two administrative actions from the last meeting. An update was provided in the board package.
- **1.3 Summary Report from June 25, 2019 Meeting** The summary report was approved by consensus.

Decision 52.1: The summary report for the June 25, 2019 meeting was adopted by consensus and will be posted to the website.

1.4 Appointment of Executive Officers – GoA and PA, and Industry Vice Presidents The terms for the Government of Alberta (GoA) and Industry Vice President expire at the current meeting.

Bev Yee was designated by the GoA and PA, and Keith Murray was designed by Industry as their respective representatives on the executive committee for the terms ending in the fall of 2021.

1.5 Approve the AWC's Proposed 2020 Core Operating Budget

The proposed budget for 2020 was circulated as supplementary material to the meeting briefing package. As part of the Government of Alberta's commitment to return the provinces finances into a balance, the annual grant AWC receives from AEP to fund core operations was reduced by 33% for 2019-2020. The draft budget reflected the expectation of a reduced core grant going forward.

Andre reviewed the core operating budget for 2020 noting that \$250,000 unspent from previous grants will be carried over to offset the reduction and bridge the gap. This is relevant as AWC's fiscal year (calendar) does not align with GoA's fiscal year. There remains uncertainty as there has been no announcement regarding the 2020-2021 core operating budgets, so the budget represents a best guess at approximately \$600,000. Staff will be implementing further cost saving measures and evaluating all options to keep expenses closer to \$500,000.

Discussion

- Are there efficiencies to be gained from aligning AWC's fiscal year to GoA's?
 - No. The misalignment of fiscal years was purposeful so AWC could provide GoA with its year-end numbers in time for GoA to budget for the next fiscal year.

Decision 52.2: The proposed 2020 Core Operating Budget was approved by consensus.

1.6 Approve 2020 Operational Plan

The draft operational plan for 2020 was included in the meeting briefing package.

Andre reviewed draft plan, noting there is capacity for the AWC to start another project team in 2020. He noted that some of the timelines may need to adjusted as the year goes on depending on how the reduced budget impacts staff capacity and if priority work not considered in the plan is identified as the year goes on.

Decision 52.3: The proposed 2020 Operational Plan was approved by consensus.

1.7 Approve Meeting Dates for 2020

The proposed 2020 board meeting dates were:

- February 25 (Calgary)
- June 17 (Edmonton)
- November 4 and 5 (Calgary)

Discussion

• Future board meetings should not be scheduled for Fridays, if possible, due to travel difficulties for some attendees.

Decision 52.4: The proposed 2020 board meeting dates were approved by consensus.

1.8 Capitalization Policy

A capitalization policy sets a threshold above which qualifying expenditures are recorded as fixed assets, and below which they are charged to expense as incurred in any given year. The AWC has used a \$1,000 threshold as its capitalization policy and the auditors have recommended the AWC formally adopt a capitalization policy with a threshold of \$3,000.

Decision 52.5: A capitalization policy with a threshold of \$3,000 was approved by consensus.

2 Protecting Sources of Drinking Water in Alberta Project Team Update

Phil Boehme provided an update on the work of the Protecting Sources of Drinking Water in Alberta Project Team. The team has prepared a source water protection (SWP) guide, a companion report with information and analysis from the various pieces of completed work, and a communications plan. The team requested the board approve the documents and disband the project team.

A potential next phase of this work is a SOO on a SWP Toolkit to build on the guide, look at the accessibility and usability of existing tools, and how to facilitate collaboration among drinking water providers and other interested groups.

Discussion

- This project was attempted previously, but a project team was not initiated due to the broad definition of source water and potential problems with scope creep. What allowed this group to surpass that barrier?
 - The revised SOO was narrow and focused on protecting drinking water sources. There were still challenges around defining it and integrating water and land management planning remains a difficult task.
 - In the previous SOO there was a concern that the project would focus more on land use than drinking water. This project team was able to achieve a good compromise.
- Surface water is a consideration in establishing risks for fire planning and management. It may be appropriate for Alberta Agriculture and Forestry to provide a presentation to the board on how fire planning and management fits with land use planning.
- How many drinking water systems are regulated?
 - Over 2000 systems are regulated by Alberta Health Services.
- Wastewater contamination is not mentioned as a potential risk.
 - The project team did not spend a lot of time analyzing individual risks. The project wasn't focused on elevating or diminishing certain risks; they are very context and location specific. The team is reporting on what individuals perceived and identified, and while wastewater contamination was recognized as a risk it was not commonly identified.
- What are the key messages or next steps for operators of private drinking water systems?
 - SWP is a daunting process particularly for small and rural municipalities and private water providers. Collaboration is important, and a combined SWP plan is an option.
 - Recognize that not everyone is at a place where they have the capacity or interest to collaborate, but to assess risks effectively access to good data is critical. The process is key, and this is a recommended approach, but it is voluntary.
 - SWP plans are a cost-effective way to deal with risk long-term.
- The collaborative approach is appreciated, but there are challenges related to decision making when different jurisdictions are involved. Water knows no boundaries jurisdictionally and the decision-making process falls outside the realm of those most impacted.
 - The GoA is attempting to bring people together for that conversation and is having different levels of success.
 - Alignment of integration of decisions across jurisdictions is a key challenge of SWP.
- Survey results showed resources and legislation as the key barriers to some of the challenges. There isn't much information in the report on federal legislation. Was this discussed by the project team?
 - The project team did have in-depth discussions on federal legislation but chose to include the regulations that were most relevant and directly applied to source water.
- This guide represents the first step. There are opportunities to operationalize it. There's a gap within municipalities on the decision-making process and this can help begin to address it.

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- Has the issue of who is taking the lead to developing source water protection plans been considered?
 - The issue was discussed but not addressed in this document; participation in the developing source water protection plans is voluntary.
- Did you learn anything in the jurisdictional plan about the effectiveness of providing tools? Does it increase the likelihood that source water protection planning increases?
 - There aren't any metrics or numbers available, but it was recognized that funding and access to information are key barriers. There was a lot of uptake in other jurisdictions (e.g., California and Colorado) when the information and funding were provided.
- The document created in this project is worthwhile and beneficial. Collaboration is a challenge, and this board should think about how that collaboration can be facilitated to that the guide can be operationalized.

There was a request to defer the decision on the communication plan until the key messages that would be included in the report release are brought to the board for offline review and approval, to ensure that one of the sectors who had reservations about approving the report is comfortable with the messaging.

Decision 52.6: The Protecting Sources of Drinking Water in Alberta: Guide to Source Water Protection Planning *and* Protecting Sources of Drinking Water in Alberta Companion Document *are approved by consensus*.

Action Item 52.1: Staff will work with the project team co-chairs to provide key messages to the board for review and decision via email prior to distribution of the final documents.

Decision 52.7: The Protecting Sources of Drinking Water in Alberta Project Team was disbanded.

There is an opportunity for AEP to co-brand the guide with the AWC to allow AEP to carry some weight in helping communicate the work publicly. It was requested the executive committee review this opportunity and decide if it is suitable to proceed.

Decision 52.8: The board empowers the executive committee to discuss the benefits of cobranding the guide with AEP and approve co-branding if appropriate.

3 Building Resiliency to Multi-Year Drought in Alberta Project Update

Co-chair Margo Redelback provided an update on the work to date of the Building Resiliency to Multi-Year Drought in Alberta Project Team. The presentation included information on the project background, the status of the work, and a request for a change to the project terms of reference to extend the timeline. The timeline extension is to accommodate the additional time required to host a pilot workshop to test the draft AWC's *Guide for Building Resiliency to Multi-Year Drought in Alberta*

Discussion

- Has the project team developed a format for the pilot workshop?
 - There have been discussions, but it will be further revised with the WPAC hosting the workshop. We have developed a pre-workshop questionnaire to circulate to the municipalities participating to help us focus the workshop on the issues and concerns most relevant to those communities.
- Can WPAC other than the hosts attend the pilot workshop?
 - The intent is for the pilot workshop to be focused on the hosting WPAC and municipalities within their watershed. The WPAC will have a "train the trainer" session after our project is complete so they can hold their own workshops in the future.

Decision 52.9: The changes to the Building Resiliency to Multi-Year Drought Project Team in Alberta Terms of Reference were approved by consensus.

4 *Water for Life* Implementation Review Committee

Jason Unger provided an update on the progress of the *Water for Life* Implementation Review Committee's work. The presentation included information on the project background, their progress to date, and their initial learnings from a sector survey.

Discussion

- There has been a decrease in funds available to municipalities for *Water for Life* goals; Watershed Resiliency and Restoration grants were held in abeyance. What is the status of those funding amounts?
 - The grants are currently under consideration. The GoA has taken an approach to ensure current year commitments were addressed and they will be revisited going forward.
- The Alberta Energy Regulator has compiled water user performance reporting for the Mining sector and Oil and Gas sectors. It includes information on water use by sector and operator. If they have not been engaged in this project, it may be good to open a dialogue.
- The information is diffuse, and there aren't a lot of tangible examples with a line of sight to recent research that has informed policy. We're lacking activities to try and take that diffuse information and put it in forms useful for the people making policy. We are lacking effective knowledge translation mechanisms and some effort is needed.
 - The challenge is not only the interface between the research and decision making; it is both the interchange and the interaction between the two that need to be strengthened. This is even more important when resources are tighter.
- In response to the *Water for Life* Implementation Review, AEP provided an action plan with a deadline in 2019. Is AEP prepared to address any outstanding items from the review?
 - AEP is prepared to review it but there have not been any discussions yet.

5 Multi-year Communication Strategy Presentation

Communications Adviser Cara McInnis presented the multi-year communications strategy. The presentation provided an overview of the process used for updating the strategy; primarily results obtained from a survey. The answers to the survey questions and the updated strategies and goals resulting from that feedback were reviewed.

Decision 52.10: The multi-year communication strategy was approved by consensus.

Tanya Thorn took the chair.

6 Environmental Monitoring and Science Division Presentation

John Orwin from AEP's Environmental Monitoring and Science Division provided a presentation on their 5-year lotic plan, and how they are applying evaluation and reporting results to modify and optimize both new and existing water-based monitoring programs across Alberta. The presentation also included characteristics of effective monitoring programs, considerations for lotic monitoring, evaluation, and reporting planning, and information on the tributary monitoring network.

Discussion

- How long did it take to complete Hydrological Response Unit (HRU) layers for the North Saskatchewan River?
 - It took approximately six months, but the preliminary work had been ongoing for nearly a decade. An HRU layer has now been created for the entire province.
- Has there been consideration for shared models and collaborations with EPCOR?
 - Yes, EPCOR is involved and there are plans for further collaboration. This project shows the value in those types of partnerships.
- Have you considered collaborating on the groundwater and surface water interaction sites?
 - Yes; groundwater and surface water interaction has come up and is a potential area of collaboration with EPCOR.
- Wetlands are sponges but they aren't always fully saturated. We don't have a measure of the level of saturation and when they may discharge to surface water. Is there instrumentation available to measure that?
 - Remote sensing is the best way to get that information given the spatial area. With LANSAT we can get information but not real time. There is a company in Lethbridge using microsatellites in a constellation that provides near real-time information with approximately a four-hour delay. AEP has some staff members in Lethbridge who are starting to work on it for wetland inventory initially, but we would eventually like to monitor wetland saturation as well.

7 Presentation on the Whirling Disease Program

Clayton James from AEP's Fish and Wildlife Policy Division provided a presentation on AEP's Whirling Disease Program. It included information on the parasite life cycle, an overview of the program timeline, and results from the 2019 surveillance program. There were also updates on aquaculture, decontamination hubs and protocols, and progress towards

laboratory testing allowing comparison of the severity of whirling disease infection between years and watersheds and moving from pooled to individual testing.

Discussion

- What vectors are the parasites using to move into Alberta?
 - Birds are a vector for moving the parasite in Alberta. We don't know about the experiences in the United States and what the vectors have been there.
- Have we advanced the testing methods enough yet that we don't have to capture the fish?
 - We have looked for intact parasites not using the fish, and we can reduce our own impact on fish populations by not looking at the fish directly. However, the Canadian Food Inspection Agency will only accept fish as the standard test if they are going to declare a watershed infected with whirling disease.
 - The province also uses non-destructive testing with e-DNA in partnership with Patrick Hannington at the University of Alberta.
- What fish are impacted by whirling disease?
 - Primarily brook trout, rainbow trout, and cutthroat trout. Mountain whitefish die from the physical impact of the parasite going through the skin, but if they have already developed scales, they are resistant. Bull trout are not susceptible. Brown trout can contract the parasite, but they don't succumb to the disease.
- The Whirling Disease situation appears to be a symptom of our failure to be cautionary in our approaches. There was monitoring in the early 2000's but it was discontinued, and we find ourselves in the current situation because of that. We need to be diligent.

8 Presentation on the Aquatic Invasive Species Program

Nicole Kimmel with AEP's Fish and Wildlife Policy Division provided an update on the Aquatic Invasive Species Program and the next steps for the province when preventing and controlling aquatic invasive species. Information on how seven different AWC recommendations on aquatic invasive species have been addressed was provided. Program highlights also included information on different aquatic invasive species: *Dreissenid* Mussels, Flowering Rush, *Phragmites*, Purple Loosestrife, Yellow Floating Heart, and the Chinese Mystery Snail.

Discussion

- Is the Chinese Mystery Snail edible?
 - Yes, but we don't know which parasites they carry. We don't know enough about them to encourage people to eat them.
- Who put Tilapia in the Elbow River?
 - We don't know. There are licensed aquaculture facilities in Calgary where they could have come from, and they have been contacted and told that the release of fish in Alberta waters is illegal and prohibited under the Fisheries Act.

9 Presentation on Ducks Unlimited Canada Program Update

Wendy Cotton with Ducks Unlimited Canada (DUC) shared an update on DUC initiatives. She provided background on the DUC, the research they have and are undertaking, their conservation programs, as well as the Municipalities and Wetland Management Course.

10 Information Reports and Questions

Several information reports were included as part of the meeting briefing package.

Discussion

- Is there an update on oil and gas liability?
 - In March of last year there was a decision on \$6.5-\$9 million in investments. There was a pause in April and May where the money could not be moved forward, including projects with some partners in the Alberta Innovates monitoring programs. They are now free to forward with those investments.
- The Ad Hoc Lake Group has meet and had discussions on lake management and tools for lake management. Further discussions are needed with AEP, as they are key to operationalizing the work.
- The Industry sector is working on a SOO on red tape reduction opportunities. The sector feels there is a good opportunity to use the AWC's multi-stakeholder process. A SOO will be provided to the AWC board at a future meeting.

11 New or Other Business

There was no new or other business.

The next board meeting will be February 25, 2020 in Calgary.

The board meeting adjourned at 2:35 p.m.

Attachment 1: Meeting #52 Attendees AWC Directors and Alternates

Maureen Bell, NGO (Environmental) Roxane Bretzlaff, NGO (WPAC) Mark Brostrom, Government (Large Urban) Bob Cameron, NGO (Environmental) Mike Christensen, NGO (Lake Environment Conservation) Deanna Cottrell, Industry (Oil and Gas) James Guthrie, Industry (Oil and Gas) James Guthrie, Industry (Mining) Jim Hackett, Industry (Power Generation) Rob Hoffman, Industry (Chemical and Petrochemical) Paul McLauchlin, Government (Rural) Dan Moore, Industry (Forestry) Keith Murray, Industry (Forestry) Morris Nesdole, NGO (WPAC)

Nissa Petterson, NGO (Environmental) Brett Purdy, GoA and Provincial Authorities (Alberta Innovates) Margo Jarvis Redelback, Industry (Irrigation) Tracy Scott, NGO (Wetlands) Tanya Thorn, Government (Small Urban) Jason Unger, NGO (Environmental) Jay White, NGO (Lake Environment Conservation) Bev Yee, GoA and Provincial Authorities (Alberta Environment and Parks) Andre Asselin, Executive Director (exofficio)

Presenters:

Phil Boehme, Protecting Alberta's Sources of Drinking Water in Alberta Project Team (Item 2) Margo Redelback, Building Resiliency to Multi-Year Drought in Alberta Project Team (Item 3) Jason Unger, Water for Life Implementation Review Committee (Item 4) Cara McInnis, Multi-Year Communications Strategy (Item 5) John Orwin, Environmental Monitoring and Science Division (Item 6) Clayton James, Whirling Disease Program (Item 7) Nicole Kimmel, Aquatic Invasive Species Program (Item 8) Wendy Cotton, Ducks Unlimited Canada Program (Item 9)

Guests:

Jenna Curtis, Alberta Environment and Parks Heather von Hauff, Alberta Environment and Parks Mario Swampy, Samson Cree Nation Lieserl Woods, Environment and Climate Change Canada

AWC Staff and Contractors:

Katie Duffett, Lauren Hall, Cara McInnis, Anuja Ramgoolam, Petra Rowell

Absent with Regrets:

Darren Calliou, Government (Métis Settlements) Stephanie Clarke, GoA and Provincial Authorities (Alberta Energy) Silvia D'Amelio, NGO (Fisheries Habitat Conservation)

Attachment 2: Meeting #52 Decision Log and Action Items

Decisions

Decision 52.1: The summary report for the June 25, 2019 meeting was adopted by consensus and will be posted to the website.

Decision 52.2: The proposed 2020 Core Operating Budget was approved by consensus.

Decision 52.3: The proposed 2020 Operational Plan was approved by consensus.

Decision 52.4: The proposed 2020 board meeting dates were approved by consensus.

Decision 52.5: A Capitalization policy with a threshold of \$3,000 was approved by consensus.

Decision 52.6: The Protecting Sources of Drinking Water in Alberta: Guide to Source Water Protection Planning *and* Protecting Sources of Drinking Water in Alberta Companion Document *were approved by consensus.*

Decision 52.7: The Protecting Sources of Drinking Water in Alberta Project Team was disbanded.

Decision 52.8: The board empowers the executive committee to discuss the benefits of cobranding the guide with AEP and approve co-branding if appropriate.

Decision 52.9: The changes to the Building Resiliency to Multi-Year Drought Project Team in Alberta Terms of Reference were approved by consensus.

Decision 52.10: The AWC's multi-year communication strategy was approved by consensus.

Action Items

Action Item 52.1: Staff will work with the project team co-chairs to provide key messages to the board for review and decision via email prior to distribution of the final documents.