

# ALBERTA WATER COUNCIL

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MEETING #45

**March 16, 2017**

**McDougall Centre, Calgary, Alberta**

## **Executive Summary**

This board meeting immediately followed the 2017 annual general meeting.

The board welcomed two new directors: Tanya Thorn representing AUMA and Darren Calliou representing Métis Settlements. Katherine Sinex was welcomed as the new alternate director for the oil and gas sector. It was agreed that the position of secretary treasurer for the Alberta Water Council Association will be the executive director, who has traditionally served in this role. The decision eliminates the need for biannual confirmation for this position. Work continues to amalgamate staff of CASA and AWC, with a meeting of both executives to take place later in March.

Andre Corbould provided an update on GoA activities, focusing on multi-year funding for organizations supported by AEP, community-based monitoring, whirling disease and the Castle Provincial Park. The board also received a more in-depth presentation on the background and current status of whirling disease in Alberta as well as the Province's response to curb the spread. Two other presentations were also given to the board, one from the Alberta Geological Survey on its Groundwater Inventory Program, and the second from Alberta Innovates on its new structure and approach, areas of investment priority and some recently-funded projects.

The Lake Watershed Management Project Team presented its revised final report following additional consultation with board members who raised questions at the November 2016 meeting. The board approved the team's 12 recommendations in five main categories: provincial lake policy, science and knowledge, lake watershed management planning, regulatory and voluntary tools for managing the uplands, and improving access to tools and education.

The final report, including four recommendations, was approved for the Evaluating Water Conservation, Efficiency and Productivity Project Team. After an in-depth evaluation of each sector's CEP plan and implementation progress reports, the team concluded that, collectively, the sectors met the 30% target. As part of its work, the team also identified strengths, gaps, and opportunities of the overall process.

## Summary of Discussion

Andre Corbould convened the meeting at 9:20 a.m., immediately following the Annual General Meeting.

### 1 Administration

#### 1.1 Approve Agenda

The Chair reviewed the agenda, which was approved by consensus.

#### 1.2 Action Items from November 3, 2016 Meeting

There were no action items from the November 2016 meeting.

#### 1.3 Summary Report from November 3, 2016 Meeting

*Decision 45.1: The summary report for the November 3, 2016 meeting was adopted by consensus and will be posted on the AWC website.*

#### 1.4 Management Report

Andre Asselin, acting executive director, presented the management report with reference to the material in the briefing book. Andre Corbould commended AWC staff for keeping everything on track in light of the AWC-CASA amalgamation process, reduced staff and a large workload.

#### 1.5 Communications Strategy Update Process

The Chair reviewed that the executive committee is responsible for leading the process to update the Communications Strategy. The process will include opportunities for staff and board input prior to review. The updated strategy will be brought to the board for approval in June.

#### 1.6 Operational Planning

Andre Asselin presented the 2017 Operational Plan, which was included in the briefing package. A board member suggested it would be good to know more about the priorities of the Water Policy branch and AEP generally as AWC looks at Statements of Opportunity and possible new projects, to ensure our work remains relevant and is acted on. AEP will be releasing its new Business Plan later today after the provincial budget is released.

The board had a brief discussion regarding engagement with Indigenous groups. AWC bylaws allocate seats on the board to Treaty 6, 7 and 8 representatives but none has actively participated for some time. The Technical Services Advisory Group has provided input to some project teams. Staff have also met with GoA Indigenous Relations staff and will forward to board members a letter from the Minister of Indigenous Relations seeking input on the GoA policy on consultation with First Nations on land and natural resource management. Board members noted the following additional points:

- The Oldman Watershed Alliance has successfully engaged local Indigenous groups and may have some guidance.
- The Environmental Monitoring and Science Division has taken a unique approach to Indigenous engagement and Dr. Fred Wrona may have useful input.

- AWC should explore and perhaps consider alternate roles and participation opportunities for Indigenous organizations.
- The board needs to further discuss how to approach Indigenous groups and be clear about any requests we make.

*Decision 45.2: The board approved the draft 2017 Operational Plan.*

**Action 45.1: AWC staff will undertake additional research related to Indigenous engagement and report back to the board.**

### **1.7 AWC-CASA Staff Amalgamation**

The Chair reviewed the status of AWC-CASA staff amalgamation, noting that a meeting of both executives will be held later this month to discuss progress and next steps. Both boards and organizations will remain independent of each other with their own bylaws. The intent of the amalgamation is to run both organizations with one administrative support unit.

### **1.8 Appointment of Executive Officer – Secretary Treasurer**

Traditionally, the AWC executive director has served as secretary treasurer and this role was reconfirmed every two years. However, the board can set the term for this position, and the executive committee recommends that the executive director be appointed secretary treasurer on an ongoing basis, eliminating the need for biannual confirmation.

*Decision 45.3: The board approved the appointment of the executive director as secretary treasurer on an ongoing basis.*

## **2 Government of Alberta (GoA) Update**

Andre Corbould gave an update on GoA activities related to water and the AWC, focusing on the key points noted below.

**Funding.** AEP has committed to multi-year grants for many of the organizations it works with, and the commitment to AWC is for three years (until the 2019–20 fiscal year) at \$750,000 per year. AEP’s budget appears promising, with work planned in the Bow River Basin to deal with provincial infrastructure, more efforts to address whirling disease, and some new initiatives.

**Community based monitoring.** Reintegration of the monitoring function back into GoA has generally been smooth and monitoring is slowly being expanded. The next task is to create a proper community-based monitoring system throughout the province, which is expected to substantially improve credibility. Work is planned over the next year to develop a good system with scientific oversight, gather shared data and advance environmental literacy. This will be done in collaboration with existing organizations. The focus will be on three concentric circles: water, air, and land and biodiversity. WPACs will be involved with water, airsheds with air, and the thinking is to consult with AUMA and AAMDC to determine their interest in leading the community-based structure on land and biodiversity issues. How to involve Indigenous organizations remains to be worked out.

**Whirling disease.** Although officially detected in August 2016, it is likely that whirling disease has been here for awhile. It is impossible to eradicate so the focus will be on managing and minimizing impacts.

**Castle Provincial Park.** This park was established last year and is the first step to advance the 17% conservation goal. We are now working to address issues related to off-road vehicle use and other matters. The key thing is that the decision was guided by good science and watershed management principles, including the need to protect headwaters.

### Discussion

*Q: With community monitoring, how will issues related to data access be overcome?*

Andre Corbould (AC): We don't know yet, but they will be. We are working to figure out how to quickly make data public in an open and transparent way.

*Q: This sounds like good progress. How will the information get to regulators who make decisions under the Water Act? Where will it fit in the decision-making process?*

AC: We hope to amalgamate advice for all three media, possibly via a board with representatives from the three monitoring areas, to advise the minister directly. How it would be set up has not yet been determined.

*Q: Would front-line decision makers be compelled to consider data being gathered by the community-based system?*

AC: Our discussions to date with regulators indicate that they would value this consolidated advice. Whether we have to compel them to use it is a point of discussion. Also, not everything needs to go to the top level. No decisions have been made yet.

*Q: Has GoA looked at other jurisdictions doing community-based monitoring?*

AC: We do a jurisdictional scan for everything and will for this too, although we have not yet found a solid model. We are meeting with BC next week to talk about their efforts. There will be opportunities for organizations to plug in as we go ahead.

*Q: How does GoA assess AWC's performance as an organization?*

Andre Asselin: The AWC Business Plan has five activity measures that we developed. It was hard to find outcome-based measures when we aren't responsible for implementation.

AC: AEP does not spend a lot of time evaluating AWC, but we do want to ensure there is no duplication of effort in the agencies we fund. Eliminating duplication and looking for gaps to ensure that important work is getting done is the focus.

*Q: The UNESCO report on Wood Buffalo National Park came out recently. One very important finding was around cumulative impacts from prior and foreseeable industry activity. The report also pointed to hydro dams, their effects on the Peace River, and the need to assess future dams by looking at environmental flows and restoring them. Concerns were noted about hydro development on the Athabasca River as well as risks from tailings. What is the preliminary reaction of the GoA to this report?*

AC: I have not yet read it and the GoA does not have any reaction at this time. We will need to examine and digest the information. I believe we are moving in the right direction on all of

those issues. Alberta is serious about hydro development as reflected in the Climate Leadership Plan. Some companies are considering new hydro in Alberta and this will help us phase out coal. We know we need to do more work on assessing and setting environmental flow needs. The federal government also needs to be involved.

*Q: Do you consider that the GoA and AEP are prepared for a major catastrophic event such as flood, drought or fire, and is there anything AWC could do to help in terms of foreseeing such events and responding?*

AC: We can't be 100% ready for every scenario but we have learned a lot of lessons and are as prepared as we can be. We've done more work in areas such as river forecasting and fire smart, and may need to do some work to demonstrate our readiness. My observation is that politicians are much more attuned to these issues now too. The GoA will make a presentation to the board on disaster preparedness at a future meeting.

*Q: What is AEP doing to address municipal infrastructure, a lot of which affects water quality and wastewater? Municipalities have lost some funding from the federal government and don't feel that we are seeing a lot of support and collaboration among GoA departments.*

AC: AEP, Transportation and Municipal Affairs are investing a lot of time and effort in municipal issues and making decisions jointly. Yes, there is a huge funding gap and we recognize that standards change and that has a cost. But the notion that AEP is not talking to Municipal Affairs or Transportation is not true. If it seems like the messages are getting mixed, we need to know that. But the big issue is not enough money.

*Q: In a 2004 discussion about water allocation, it was noted that licences could be transferred and the GoA could withhold some water for environmental purposes. What is the status?*

AC: Yes, we are doing that and it is related to conservation objectives. When directors do a transfer, they can hold back up to 10%, which they have to do when Water Conservation Objectives (WCOs) are not being met. If a WCO is being met, there could be more latitude. But this is a director-level decision based on clear policy.

### **3 Lake Watershed Management Project Team**

Given the inability of the co-chairs to attend, team member Ron McMullin presented the team's work. The team delivered a detailed presentation at the November 2016 meeting and was requested by the board to make a few modifications. Ron reviewed the specific changes made to recommendations in response to board input, also noting the addition of a definition for "reservoir." Directors who raised issues at the November meeting were consulted and they signed off on suggestions prior to the team considering and approving the changes. Ron also presented the proposed communications plan for the report. A short discussion with board members ensued:

- What happens if GoA doesn't approve a lead authority? Could this slow the process?
  - AEP: We are not worried about that. If someone doesn't like who is appointed, they will say so. It won't slow the work.
- It seems there is redundancy here with recommendations AWC has made in connection with other projects; e.g., non point source pollution. Some of those have not been acted on and appear similar to recommendations from this project.

- NPSP recommendations were directed to the whole aquatic ecosystem while these are focused on lakes.

***Decision 45.4: The board:***

- a) Approved the report: Recommendations to Improve Lake Watershed Management in Alberta***
- b) Approved the communications plan***
- c) Disbanded the Lake Watershed Management Project Team***

The board thanked the team for its excellent work and thorough report.

**4 Evaluating Water Conservation, Efficiency and Productivity Project Team**

Rob Hoffman presented the final report of the Evaluating Water CEP project team. The team reviewed each sector's CEP plan and implementation progress reports to evaluate the various sector contributions. The team developed business as usual scenarios to illustrate how much water would have been used with no improvement in efficiency or productivity and applied the scenarios to six sectors. The chemical sector was not included as they are working to develop a productivity measure. The team concluded that collectively the sectors met the 30% target. The team also reviewed the strengths and gaps of the overall process as well as opportunities. Rob presented the four recommendations as well as the draft communications plan.

Discussion

Board members asked questions and provided comments, and team members and staff responded.

- Is there data on WURS that shows diversion? Also, what about compliance?
  - We did have a presentation on data availability. A key issue is that not everybody is required to participate, and even some of those who are, don't. We are trying to improve reporting and compliance to close administrative reporting gaps. WURS operates on a very outdated platform. It's a big system and needs funds in order to be updated.
- I struggle to understand how additionality was evaluated for the sectors; e.g., how to evaluate public investment in irrigation infrastructure without CEP.
- I am glad to see the effort to come up with one number to assess improvements. However, fracking was not included in this work due to lack of data but there is concern about the number of permits issued. It would help to say which oil and gas area was not covered, and that we do need to identify fracking water use. This is a very complex issue and I don't think it's on the radar for many people.
- What is the goal of the five-year review?
  - To have the sectors continue to work to maintain momentum, monitor consumption and stay on top of trends. We captured a lot of the easy opportunities and are unlikely to see another 30% in the next ten years, but we want to track trends. We need a forum to continue evaluating opportunities and to improve data quality and credibility of what is being tracked.
- The recommendations are very focused on tracking data but it is not clearly stated why the tracking is being done; that is, for continuous improvement and other purposes. Do we need to talk about the principle and vision for managing water?

- The driver is implicit in the CEP process but maybe not so much in this report since this team's purpose was to look at progress to date. Continuous improvement was a key part of the original work. This message could be included in the communications package to underscore why the data tracking system is needed.
- Was any consideration given to benchmarking to see what others have done; e.g., irrigation sectors in other parts of the world?
  - Not in detail. We did do a jurisdictional scan. There may not be a lot of readily available data that can be compared.
- It should be pointed out that this work was beneficial to the sectors and industries that did it, so there was a lot of self-motivation. Also, when the project began, the 30% improvement was voluntary; the effort was successful, so what will GoA do with the information from this work? Finally, can we make this information available to the head of WURS to perhaps help with their next budget?
  - AEP: As to what we the GoA will do with this information, we don't know yet, but we'll get there. And yes, the information can be provided to WURS.

***Decision 45.5: The board:***

- a) Approved the report: Looking Back: Evaluating Sector Planning for Water Conservation, Efficiency and Productivity***
- b) Approved the communications plan, with some additional context related to continuous improvement and why the data tracking system is needed***
- c) Disbanded the Evaluating Water CEP Project Team***

The board thanked the team for its excellent work on a very challenging task.

## **5 Alberta Geological Survey – Groundwater Inventory Program**

Dan Palombi, a hydrogeologist with Alberta Geological Survey (AGS), gave a presentation on Alberta's groundwater inventory program. Hard copies of his presentation were distributed. AGS is a science unit within the Alberta Energy Regulator. Dan described the work and objectives of AGS generally, noting the history of groundwater mapping in Alberta. His presentation provided an overview of the geological system and data sources related to geology and groundwater. He described some of the products of the groundwater assessment system, noting recent projects including the Area-Based Regulation project in the MD of Greenview. He concluded by looking in more detail at studies in the Calgary-Lethbridge Corridor, the Sylvan Lake region and the Fox Creek area. He showed how geoscience is integrated into evidence-based decision making and described the strategic partnerships AGS has established. AGS releases different formats of data, included a map-based product. Updates are not undertaken frequently. Dan then responded to questions from board members.

### Discussion

*Q: Are you contemplating work similar to what was done in Fox Creek in other areas?*

Dan Palombi (DP): We want to do more work in northwest Alberta as there is interest in the Peace watershed. The Cardium formation may be next and there may also be some opportunities in the in situ oil sands area.

*Q: Is it in your mandate to identify data gaps?*

DP: Yes, that is more or less the first step—where could we enhance monitoring in a region, where new drilling might occur, etc.

*Q: Does AGS still have wells?*

DP: We transferred infrastructure and liability back to AEP about five years ago so AGS no longer owns or has liability for any wells.

## **6 Alberta Innovates Research Update**

Brett Purdy presented the annual update from Alberta Innovates (AI) and provided hard copies of his presentation. He reviewed the recent reorganization and restructuring in which four previous corporations were merged; the organization now takes a more cross-disciplinary approach to projects it funds. When making investment decisions, AI wants to see stretch targets to support knowledge and technology. Their four key areas of investment priority are linked by efforts to understand and improve adaptation resilience. Brett described the priorities to meet GoA needs and Alberta water community needs, and the process for new work and briefly noted some of the recent projects that were funded in different categories.

## **7 Whirling Disease Update**

Peter Giamberardino, Whirling Disease Coordinator with AEP, provided an update on whirling disease to the board and distributed hard copies of his presentation. He began with details about the disease itself then looked at Alberta's response, current status, and plans to curb the spread. Current thinking is that the disease came from aquaculture facilities and anglers and, at this point, we don't know what impact it will have. Once established in a wild population, whirling disease cannot be eradicated. Alberta's three-part action plan aims to manage the disease over the long term. Peter then responded to questions from board members.

*Q: In addition to anglers, are you also reaching out to waterfowl hunters?*

Peter Giamberardino (PG): It depends on their proximity to high risk areas. This has not been a major focus to date.

*Q: You mentioned more than 200 samples have been taken. Are these just fish?*

PG: Yes. There is not a lot of research related to sediment sampling for this purpose. We partnered with Alberta Innovates to create a lab in Vegreville so we don't have to send samples out of province. This is speeding up the processing and results. In the next 10–12 weeks, we will have moved through 200 samples and have a better idea of where the disease exists. Two samples from the Upper Peace were tested and came back negative.

*Q: Was finding the disease a surprise?*

PG: In 1997 when whirling disease was found in wild populations in the US, Alberta did start sampling and established a committee that remained intact until 2000. But I think there was an element of surprise. Provincial hatcheries have tested negative but we will be hiring an external consulting firm to build a better biosecurity protocol for hatcheries.

*Q: Is there any inherent resistance in places where the disease has been for a long time?*

PG: In the northeast US, they have seen more resilience in native populations compared with the western states. Our work is important because we still don't know what the impact on the native trout population will be.

*Q: Is there any relationship between the presence of Tubifex and water quality? In the 1990s, some samples were in areas with a lot of manure runoff.*

PG: These worms are very resilient. They bury deep down and can survive cold temperatures. I would hesitate to get into too much detail on their other attributes.

*Q: What is the risk to other rivers such as the Oldman and Red Deer and are there risks to lake whitefish from potential flooding?*

PG: Lake whitefish are resilient, but the risk related to flooding is fairly high.

*Q: Industries take water samples at different times of the year for various purposes. Have you reached out to them?*

PG: Yes we are connecting with industry when we do leases and *Water Act* approvals, depending on where they are working. We want industry to know that decontamination protocols are in place.

*Q: As fish hatcheries are deemed clear, will they need a protocol for ongoing testing?*

PG: Yes. As we get more capacity for testing, a longer term sampling plan is very appropriate. We will do a biosecurity protocol with the four provincial hatcheries and will likely move to share it with private ones.

## **8 New or Other Business**

The Chair reminded board members that AWC has capacity to take on new work and they should contact Andre Asselin with any ideas.

When asked, board members indicated that they would like to receive copies of the presentations electronically prior to the meeting. Staff will aim to provide copies by email but will also bring a few hard copies to each meeting.

Interest was also expressed in the possibility of a private section of the website for board members.

The board meeting adjourned at 2:55 p.m.

## **Attachment 1: Meeting #45 Attendees**

### **AWC Directors and Alternates**

Maureen Bell, NGO (Environmental)  
Mark Brostrom, Government (Large Urban)  
Darren Calliou, Government (Métis Settlements)  
Carolyn Campbell, NGO (Environmental)  
Andre Corbould, GoA and Provincial Authorities (Alberta Environment and Parks)  
Deanna Cottrell, Industry (Oil and Gas)  
Cheryl Fujikawa, NGO (WPACs)  
James Guthrie, Industry (Mining)  
Jim Hackett, Industry (Power Generation)  
Rob Hoffman, Industry (Chemical and Petrochemical)

Ron McMullin, Industry (Irrigation)  
Keith Murray, Industry (Forestry)  
Brett Purdy, GoA and Provincial Authorities (Alberta Innovates)  
Tracy Scott, NGO (Wetlands)  
Katherine Sinex, Industry (Oil and Gas)  
Tanya Thorn, Government (Small Urban)  
Jason Unger, NGO (Environmental)  
Jamie Wuite, GoA and Provincial Authorities (Alberta Agriculture and Forestry)

### **Presenters:**

Andre Asselin, *Management Report* (Item 1.4.), *Operational Planning* (Item 1.5)  
Andre Corbould, *GoA Update* (Item 2)  
Ron McMullin, *Lake Management Project Team* (Item 3)  
Rob Hoffman, *Evaluating Water CEP Team* (Item 4)  
Dan Palombi, Alberta Geological Survey, *Groundwater Inventory Program* (Item 5)  
Brett Purdy, *Alberta Innovates Research Update* (Item 6)  
Peter Giamberardino, AEP, *Whirling Disease Update* (Item 7)

### **Guests:**

Sharon Willianen, AEP

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

Andre Asselin, Anuja Ramgoolam, Kim Sanderson

### **Absent with Regrets:**

Dave Burdek, GoA and Provincial Authorities (Alberta Agriculture and Forestry)  
Silvia D'Amelio, NGO (Fisheries Habitat Conservation)  
Doug Lammie, GoA and Provincial Authorities (Alberta Energy)  
Al Kemmere, Government (Rural)  
Stuart Thiessen, Industry (Livestock)  
Jay White, NGO (Lake Environment Conservation)

## **Attachment 2: Meeting #45 Action Item Log**

Action 45.1: AWC staff will undertake additional research related to Indigenous engagement and report back to the board.

## **Attachment 3: Meeting #45 Decision Log**

*Decision 45.1: The summary report for the November 3, 2016 meeting was adopted by consensus and will be posted on the AWC website.*

*Decision 45.2: The board approved the draft 2017 Operational Plan.*

*Decision 45.3: The board approved the appointment of the executive director as secretary treasurer on an ongoing basis.*

*Decision 45.4: The board:*

- a) Approved the report: Recommendations to Improve Lake Watershed Management in Alberta*
- b) Approved the communications plan*
- c) Disbanded the Lake Watershed Management Project Team*

*Decision 45.5: The board:*

- a) Approved the report: Looking Back: Evaluating Sector Planning for Water Conservation, Efficiency and Productivity*
- b) Approved the communications plan, with some additional context related to continuous improvement and why the data tracking system is needed*
- c) Disbanded the Evaluating Water CEP Project Team*

ALBERTA WATER COUNCIL  
AGENDA, MEETING #44

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March 15, 2017

McDougall Centre, Calgary

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**NOTE: Broad Category caucusing from 8:00 to 9:00 am followed by Members meeting from 9:00 to 9:15 am**

**ANNUAL GENERAL MEETING**

**9:00 1.0 Administration – Chair 15 min**

- 1.1 Welcome, review health and safety and approve agenda
- 1.2 Approve draft Summary Report from April 7, 2016 AGM
- 1.3 Approve 2016 audited financial statements
- 1.4 Select auditor for 2017
- 1.5 AWC membership

**BOARD OF DIRECTORS MEETING**

**9:15 1.0 Administration 45 min**

- 1.1 Approve agenda
- 1.2 Review of actions from last meeting
- 1.3 Approve Summary Report from November 3, 2016 meeting
- 1.4 Management Report
- 1.5 Communications strategy update process
- 1.6 Operational Planning
- 1.7 AWC-CASA staff amalgamation
- 1.8 Appointment of executive officer – Secretary-Treasurer

**10:00 Break 15 min**

**10:15 2.0 Government of Alberta Update 30 min**

Hear an update from the GoA

**10:45 3.0 Lake Watershed Management Project Team 30 min**

Approve the team’s final report and communications plan, and disband the team

**11:15 4.0 Evaluating Water CEP Project Team 30 min**

Approve the team’s final report and communications plan, and disband the team

**11:45 Lunch 60 min**

**12:45 5.0 Alberta Geological Survey – Groundwater Inventory Program 45 min**

Hear a presentation on the groundwater inventory program

**1:30 6.0 Alberta Innovates Research Update 45 min**

Hear an update from Alberta Innovates on the Water Innovation Program

**2:15 7.0 Whirling Disease Update 45 min**

Hear an update from Environment and Parks on the whirling disease outbreak

**3:00 New Business**

**3:15 Adjourn**