

# BCWA Board Meeting Summary

September 14, 2016

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**Members and Participants Present** Mike Towner, Lakewood; Dave Lighthart, Evergreen; Chris Schauder, West Jefferson Metro District; Tony Langowski, Kittredge Water and Sanitation District; Simon Farrell, Aspen Park; Simon Farrell, Morrison; Adam Eccles, Bio-Domes; Russell Clayshulte, Manager

**Call to Order** – Chris Schauder called meeting to order at 9:15 a.m., a minimum quorum was present. The meeting held at the Evergreen Metro District Offices.

## **Board Action Items**

1. **August 2016 Meeting Summary** –A motion was made by Tony Langowski and seconded by Chris Schauder to accept the meeting summary as presented. The motion passed.
2. **Billings** - A motion was made by Simon Farrell and seconded by Mike Towner to pay the bills as presented. The motion passed.
3. **TRS Recommendations**
  - **PGO28 Membership In-kind Program.** Membership Entities and Participants as defined in the *PGO16 2015 By-Laws* and in *BCWA Policy 16 Membership* support the program by providing various types of in-kind services and costs. These in-kind services and costs are essential in reducing the overall program and monitoring costs covered under the annual Cost Share Program (*BCWA Policy 33 Cost Share Program*). The TRS had identified a number of in-kind services that should be included in PGO28. The board noted that there are other members who have provided in-kind services and they should be added to PGO28 when information is provided to the manager. A motion was made by Simon Farrell and seconded by Chris Schauder to accept PGO28 as presented. The motion passed.
  - **Discussed NPS Project Notice from the WQCD.** There was general discussion about the NPS program and the potential to apply for future funding.
  - **Reviewed Bio- Dome Concept.** Adam Eccles with WCS attended the meeting to discuss the potential use of Bio-Domes as an in-reservoir phosphorus reduction strategy. Adam presented the Bio-Dome design criteria and installation of the Bio-Dome system. WCS manufactures and sells patented submersible aerated fixed-film (biofilm) reactors under the trade name Bio-Dome that was developed at the University of Utah to reduce BOD, TSS, P or NH<sub>4</sub><sup>+</sup>-N from wastewater streams in a lagoon environment. This concept can also be applied to small reservoirs and is being tested under this application by WCS. Each Bio-Dome consists of an assembled 4-dome set that contains 4,400 ft<sup>2</sup> of an aerated surface, utilizing patented 100:1 surface enhancing packing material to support the fixed-film growth. The Bio-Dome system consists of concentrically nested domes that are infused with air from the bottom. They sit on the floor of a lagoon and are completely submerged. As the air and water flows through them, bottom-to-top, beneficial bacteria effectively reduce contaminants in the water. Adam showed slides of the system and discussed the potential use in BCR. Bio-Domes are approved by the WQCD as an alternate technology. The Board had considerable discussion about the design, use application and potential for nutrient reduction. The Association recommended that Adam determine an approximate TP reduction rate for each dome. The cost of each dome installed is about \$4,000. The WCS is willing to provide a guarantee that the system can reach TP reduction targets and

if the system fails, they would remove and refund initial costs. The Association requested that the manager update Policy 15 Nonpoint Source Strategies and BMPs and Policy 20 Preferred Management Strategies EGL and BCR to incorporate this treatment alternative. The manager will work with Adam to develop an Association fact sheet that includes the TP reduction information and identify this treatment alternative for use in the watershed.

#### 4. Other Actions

- Fact Sheet 56 Climate Model UBCW. A motion was made by Mike Towner and seconded by Tony Langowski to accept the fact sheet as presented. The motion passed. The manager noted the need to continue the discussion about the concept steps that the Association should undertake in order to better manage the watershed in future years as identified in the climate model exercise.

#### Board Discussion Items

- The manager reviewed the technical memo on the cost share basis. There was continued discussion about the cost share program and some changes were made to the memo on the cost basis, but due to low membership turn-out at the Board meeting, the co-chair referred this item to the September TRS and October Board meetings for continued discussion and action.
- Weather Stations. The looked at the map of weather station coverage by the Weather Underground and noted a large number of stations within the watershed. The Association support the concept of having the manager investigate establishing a weather network for the watershed using Weather Underground. The cost appears nominal.

#### Membership Updates and Issues Forum

**Evergreen** – The district noted the FEMA project closure process is continuing and a new bottom contour survey is needed. The dredging didn't cause a water quality problem in the Lake.

**Jefferson County** – No update

**Jefferson County Health Department** –No update.

**Clear Creek County** – No update.

**Lakewood** - Provided an update on BCR conditions and fishery. The Corp completed a new sediment study and a new bathometric survey of BCR.

**Denver Water** – No update.

**Wastewater Dischargers** – The start-up of the new Fort onsite system is complete.

**Corps of Engineers** – No update or recent involvement with Association.

**Jeffco Schools** – Mt. Evan School treatment works is operational and meeting expectations.

Administrative Items – No discussions.

Adjournment – The meeting adjourned at 11:25 p.m. (Motion by Mike Towner and seconded by Simon Farrell).