

**Blue Water Task Force Board of Directors Meeting  
November 19 2008 3:30 PM  
B.S.O.A Conference Room**

**MINUTES**

1. **Call to Order:** The meeting was called to order by Chairman Jon Holtzman, at 3:40. Also in attendance were directors Sue Barton, Eric Becker, Ron Edwards, and Mindy Nowakowski. Absent were directors Jack Crowther, Caroline Henley, and Simon Trautman.
2. **Approval of Minutes:** Eric moved and Ron seconded to approve the minutes from 10-22-2008. Motion carried unanimously.
3. **Financial Report:** Mindy moved and Ron seconded to approve the financial reports. Motion carried unanimously.
4. **New Business**
  - a. Simon Trautman and Caroline Henley: Simon resigned from the board because he is accepted a job in Colorado and Caroline resigned because she has moved to Bozeman, and is rarely in Big Sky. Mindy moved and Sue seconded to accept Simon and Caroline's resignation from the board. Motion carried unanimously.
  - b. New Board Member: The board discussed the need to fill the two open board positions. Kristin recommended that we nominate Mike Richter from Montana Bureau of Mines and Geology for a position on the board. Mindy moved and Sue seconded to nominate Mike Richter for a position on the board. Motion carried unanimously. Mike accepted the nomination. Kristin reported that in recent conversation, Dax Schieffer, the PR manager at Big Sky Resort, mentioned that he or someone else at Big Sky Resort would be interested in a position on the board. Kristin will follow up with Dax.
5. **Old Business**
  - a. Groundwater study (Kristin/Mike): Kristin and Mike Richter updated the board on the groundwater assessment program. Kristin passed out maps of the meadow village wells that she and Jeremy have been monitoring since June. Water level fluctuations saw a minimal decline between June and October. There were multiple wells with nitrate levels above 2mg/L, which indicates "human impact". Nitrate levels were measured in July and October. Next year, nitrate will be measured in April, prior to golf course irrigation as well as throughout the irrigation season to be able to make a before/after comparison. Mike Richter has been monitoring 21 wells throughout the Big Sky area to capture each of the known geology/aquifer types that exist in the Big Sky area. Mike showed the board a sample of groundwater

hydrographs. Generally, water levels declined through the summer, with an exception near the Big EZ in the Kootenai formation. A few wells appeared to be impacted by summer irrigation; one well saw a 50 foot drop over the summer. Mike informed the board that there is only one groundwater well in the Madison formation across from the Conoco at the outcrop of the Madison. The Madison formation in the Big Sky area is generally very deep (>3000 feet). This fact refutes rumors that have circulated that growth in Big Sky is depleting the Madison aquifer, a big contributor to Gallatin streamflow. Jon asked if any of the MBMG studies have seen significant drops in water level due to development. Mike said they have not. Mike informed the board that he has installed two transducers which measure groundwater level on an hourly basis. One well is located in the meadow village alluvial aquifer, while the other well is located in the fractured volcanic layer in mountain village. Both of these wells will become part of the MBMG's long term monitoring network. Ron asked how the well elevations were determined. Mike replied that the well elevations were determined from a topographic map. Ron suggested that next summer we survey tight well elevations. Ron offered to help with the surveying. Kristin asked if the long term MBMG monitoring wells in the Bozeman area and the Gallatin Local Water Quality District long term monitoring wells were the same wells. Mike said that some are the same but that the district drills some of its own wells.

- b. Stream gauges update (Kristin): Kristin found out more information on a USGS stream gauge on the West Fork. After the initial installation, the cost would continue to be at least \$7500 a year plus appreciation. After speaking with her advisor at MSU, Brian McGlynn, he said we could do it for much cheaper and still have the real-time water levels on our website. Kristin mentioned that she had spoken with BSI director Todd Kipfer about potentially collaborating on a stream gauge project a year or so ago. She will revisit with BSI to discuss the possibility. The current capacitance rods (aquarods) belong to the DEQ and will be taken out after the TMDL is completed. Ron offered to potentially contribute money towards the stream gauges since in recent years BSWS has not been monitoring surface water.
- c. TMDL update (Kristin)
  - i. TMDL public meeting: Kristin will try to coordinate the TMDL meeting to be on February 19<sup>th</sup> at the Ophir School library.
- d. Gallatin local water quality district (GLWQD) update (Kristin): The GLWQD board has decided to move forward on expanding the district boundary to Big Sky. The next step is for community outreach. Kristin will organize a community meeting either at the BWTF annual meeting or otherwise. In addition, there will be a press release.
- e. North fork restoration project (Kristin): Kristin will be meeting with Everlands, BSI, and Lone Mountain Ranch to iron out some of the details of the restoration on the North Fork. Simon would like to

continue to be involved in this project and will be back in Montana next summer.

- f. Insurance update (Kristin): The insurance applications have been sent in to First West and Carolina Casualty but they have not responded back yet.
- g. Stream signs (Kristin): Kristin reported that the stream signs on community trails indicating BWTF sampling sites are in place.
- h. WWSF update (Jon/Ron): Jon reported HKM has finished a preliminary report on the feasibility of providing public sewer to the Gallatin canyon between Big Horn plaza and the Corral. With expansion, the current capacity of the existing wastewater treatment plant will last an estimated 12 years, while the existing golf course will have enough wastewater disposal capacity of the 18-20 years. When a new disposal alternative is needed it is recommended that the first alternative be the use of a snowmaking system located on or near the ski area. The estimated cost of the first phase is 10 million dollars – with approximately half covered by grants. WWSF has developed a public outreach plan, which includes 1 on 1's with targeted canyon residents.

## **6. Upcoming Events**

- a. November 25<sup>th</sup>: Field event with Ophir 3<sup>rd</sup> Grade/ BSI (845am-1050am)
- b. December 1<sup>st</sup> – Groundwater Sampling Event, meet at BWTF Office at 9:30 am.
- c. December 2<sup>nd</sup> – Quarterly Water Sampling Event, meet at BWTF Office at 9:30 am.
- d. December 3<sup>rd</sup> – Wastewater Solutions Forum Meeting, 1pm Big Sky Water and Sewer Meeting Room.
- e. December 4<sup>th</sup> – Headwaters Partnership annual gathering- 6pm at Twin Bridges High School cafeteria
- f. December 8<sup>th</sup>-January 9<sup>th</sup>: Kristin out of town.
- g. December 19<sup>th</sup> – Field day with Lone Peak High. Meet at Ophir at 8:30am.
- h. Next board meeting date:

## **7. Open Discussion**

- 8. Adjournment** The meeting adjourned at 4:20 pm