Aquatic Task Force Meeting, December 11, 2007

People present:

Joe Platz	406-233-2867	jplatz@blm.gov
Tavor Selch	406-444-5686	tselch@mt.gov
David Harper	307-733-2314	david_harper@usgs.gov
Windy Davis	406-234-0942	widavis@mt.gov
Brad Schmitz	406-234-0914	brschmitz@mt.gov
Bud Stewart	307-684-2489	Bud.stewart@wgf.state.wy.us
Kevin Gelwicks	307-745-5180	Kevin.gelwicks@wgf.state.wy.us
Dave Peterson	307-775-9170	davep@usgs.gov
Robert McDougal	303-236-1854	rmcdougal@usgs.gov
Dave Feldman	406-444-6764	dfeldman@mt.gov
Banning Starr	406-444-6777	bstarr@mt.gov
Mike Sweat	307-775-9174	mjsweat@usgs.gov
Tom Cleasby	406-457-5919	tcleasby@usgs.gov
Peter Wright	406-656-1444	prwright@usgs.gov
Larry Gerard	307-684-1142	<u>Larry-gerard@blm.gov</u>
Bill Ostheimer	307-684-1117	Bill_ostheimer@blm.gov
Jeremy Zumberg	307-673-9337	Jzumbe@wyoming.gov

Via Phone:

Bob Bramblett Bob Bukantis Aida Farag Sam Cox Gretchen Meyer

Meeting began at 8:15am

Five presentations on monitoring/research were given to the group.

These consisted of: (1) <u>USGS Monitoring/Report</u> by Dave Peterson. (2) <u>Toxicity Research on Bicarbonate by Dave Harper.</u> (3) <u>MSU Research on Effects to Fish Assemblages</u> by Windy Davis. (4) <u>Aerial Imagery</u> by Larry Gerard, Robert McDougal, Sam Cox and Gretchen Meyer. (5) <u>Amphibians</u> by Joe Platz and Larry Gerard.

Highlights from the meeting include the following:

USGS Monitoring

* USGS draft report will be completed in January of 2008. Review will be conducted by a few colleagues (Some of which are apart of the ATG). The draft report will also be given to BLM, FWP and other organizations apart of the ATG for information only. This information will not be made public until the final

- publication.
- Expected timeframe for the final USGS Monitoring report would be January of 2009.
- A power point presentation for the IWG would be beneficial for USGS monitoring, toxicity research and other research/monitoring projects.

Toxicity Research

- The low level LC50 for the bicarbonate ion is approximately 500-600 mg/l. For effects on growth, the low level is 500 mg/l. CBNG discharge water typically ranges from 1000 to 1100 mg/l.
- In order to make bicarbonate criteria recommendations, more research must be conducted on amphibians and possibly some other species. Increased funding is needed: \$20,000 \$30,000.
- Suggested further toxicity research on organics, streambed substrates, mixing zones and trace metals.
- Once the bicarbonate criteria is developed, it can take a year a more to create a standard for CBNG. However, this criteria could be adopted by the BLM in their permitting process, prior to "standard" approval.
- USGS, Toxicity research and aerial imagery need to develop proposals for funding.
- Suggested conducting bicarbonate tests on longnose dace and sauger. There are problems with obtaining these fish species.

MSU Research

- MSU Research found that species richness changed from 1994 2006 in both controls and CBNG impacted streams (most likely a low water flow issue).
- Suggested research should be conducted to assess fish assemblage response to continuous input of product water in normally stochastic systems; stations for water discharge, quality, temperature info. The ATG group identified that discharge is hard to quantify due to irregular discharge patterns.

Aerial Imagery

- ATG was concerned over the usefulness of aerial imagery. It was identified that the original intent was for habitat classification in relation to the Powder River. The group indicated that if we could get an idea of the amount of instream habitat available during certain flow levels, then it could be useful information. A graduate student is currently working on this type of information with WY Game and Fish
- Trying to quantify CBNG discharge is a problem. Need information from Water Group to try to quantify CBNG discharge. Joe will talk to Andy Bobst. Jeremy will talk to permitting personnel in WYDEQ.

• Suggested a conference call during the first 2 weeks of January to discuss aerial imagery.

Herptile monitoring

- Montana Heritage and University of Wyoming have obtained the funding from the ATG for herptile monitoring in the spring of 2008.
- Bill Turner is no longer with WDGF, but completed a report of the Powder River herptile monitoring. Bud Stewart was going to send it out to Joe Platz for distribution.

Other information

- Other research/monitoring within the CBNG area included: (1) University of Wyoming Variation of fish assemblages during the summer for the Powder River. (2) Leopard frog monitoring within Wyoming CBNG development areas.
 (3) MSU herptile monitoring for the CBNG area.
- No new CBNG development without prior Environmental Analysis approval will occur in MT prior to SEIS completion.
- CBNG development in WY is business as usual.
- CBNG discharge outfalls need to be located on the outside of meander bends, in order to provide for improved mixing of CBNG discharge water.
- The ATG should have some recommendations for the IWG meeting in May for protecting aquatics.

Funding

- Available funding includes the following: (1) 150K for aquatics monitoring; (2) 105K for herptile monitoring; (3) WY DEQ potential for 100K; (4) USGS can match BLM @ 13.5% (16%-29.5K).
- Potential funding needs: (1) Toxicity research, (2) USGS monitoring; (3) Aerial imagery; (4) Herptile monitoring on Bitter Creek area in WY; (5) Information on CBNG production water discharge rates.

Needs for next meeting and future:

- (1) USGS, Toxicity research and aerial imagery need to develop proposals for funding.
- (2) A power point presentation for the IWG would be beneficial for USGS monitoring, toxicity research and other research/monitoring projects.

- (3) The ATG should have some recommendations for the IWG meeting in May for protecting aquatics.
- (4) Trying to quantify CBNG discharge is a problem. Need information from Water Group to try to quantify CBNG discharge. Joe will talk to Andy Bobst. Jeremy will talk to permitting personnel in WYDEQ.
- (5) Suggested a conference call during the first 2 weeks of January to discuss aerial imagery.
- (6) Bill Turner is no longer with WDGF, but completed a report of the Powder herptile monitoring. Bud Stewart was going to send it out to Joe Platz for distribution.
- (7) Available funding includes the following: (1) 150K for aquatics monitoring; (2) 105K for herptile monitoring; (3) WY DEQ potential for 100K; (4) USGS can match BLM @ 13.5% (16%-29.5K).
- (8) Potential funding needs in 2008: (1) Toxicity research, (2) USGS monitoring; (3) aerial imagery; (4) Herptile monitoring on Bitter Creek area in WY; (5) Information on CBNG production water discharge.

Next meeting date is February 5th in Buffalo.