Aquatic Task Group Meeting
November 1, 2005

Present:

Name	Agency	E-mail	Telephone
Bob Bukantis	DEQ - Helena	bbukantis@mt.gov	406-444-5320
Mike Sweat	USGS – WY WSC	mjsweat@usgs.gov	307-775-9174
Windy Davis	MSU-MTCFRU	wdavis@montana.edu	406-994-6643
Tina Laidlaw	EPA - Helena	laidlaw.tina@epa.gov	406-457-5016
Dave Peterson	USGS – WY	davep@usgs.gov	307-775-9170
Don Skaar	MFWP - Helena	dskaar@mt.gov	406-444-5686
Tom Cleasby	USGS - Helena	tcleasby@usgs.gov	406-457-5919
Paul Beels	BLM – WY	Paul_beels@BLM.gov	307-684-1168
Dale Tribby	BLM - Miles City	dtribby@mt.blm.gov	406-233-2812
Bob Bramblett	MSU	bbram@montana.edu	406-994-4433
Al Zale	MTCFRU	zale@montana.edu	406-994-2380
Larry Gerard	BLM - Buffalo	larry_gerard@blm.gov	307-684-1142
Paul Mavrakis	WGFD	Paul.Mavrakis@wgf.state.wy.us	307-672-7418
Jeremy Zumberg	DEQ – WY	jzumbe@wyoming.gov	307-751-0016
David Zafft	WGFD - Laramie	david.zafft@wyoming.gov	307-745-5180
Joe Platz	BLM - Miles City	jplatz@blm.gov	406-233-2867
Irma Torres-Leon	BLM - Miles City	itleon@blm.gov	406-233-2817
Steve Regele	DEQ - Billings	sregele@mt.gov	406-247-4433
Brad Schmitz	FWP – Miles City	Brschmitz@mt.gov	406-234-0900
Darin Watschke	USFS - Custer NF	dwatschke@fs.fed.us	406-657-6205 x236

Meeting began at 9:30 a.m.

- Everyone requested to sign in and introduce themselves.

- David Zafft gave a power point presentation: “Baseline Fish and Aquatic Habitat Sampling, Powder River, Wyoming”.
    - Goal: to gather baseline data.
    - Study area
        - Powder River in WY.
        - 10 sites in 2004, 11 sites in 2005.
        - Each site 2 miles in length.
        - Sampled every month for five months (June-Oct).
    - Sampled fish
        - Random start point.
        - Counted all fish.
    - Sampled different stream habitats
        - Looking at different habitats.
    - Observed first sturgeon at confluence with Crazy Woman Creek.

    - Limitations of data
        - Baseline information.
        - Not relative abundance.
    - Dave asked for questions and advice on what and how should they monitor to assess aquatic habitats without wasting time and money.
- Questions/Comments:
    - Q: How is WY Game and Fish associated with USGS monitoring?
    - A: USGS has adopted these study sites and applied EMAP protocol to Game and Fish surveys.

- Dave Peterson gave a PowerPoint presentation: "Summary of Aquatic Ecology Sampling Conducted for the ATG by USGS 2005".
    - Benthic Macro-invertabrates
        - Collected NAWQA protocol.
    - Invert Taxonomy
        - Chironomid ID and time frame have been an issue with the lab.
    - Habitat
        - EMAP protocol.
    - Algal Sampling Analysis
        - Received $34,000 for funding.
        - 29 samples for taxonomic analysis.
        - RTH samples analyzed for chlorophyll and AFDM.
        - It was purposed to use Academy in Philadelphia as an alternate lab.
    - Fish Samples
        - Followed EMAP protocol.
        - Sites in WY on Powder River done by WGFD.
        - Sites in MT on Powder River done by USGS following WGFD protocol.
    - Fish Taxonomy
        - Voucher specimens: concerns with costs and lab selection.
        - Curation: still looking for lab.
    - Water Quality
        - Major ions in MT and WY sites.
        - Field parameters at all sites.
- Questions/Comments:
    - Q: Has anyone contacted Jerry Kosa at Bug Lab to elevate fish ID priority?
    - A: Joe contacted Gail Sitter to elevate priority and Larry Gerard has contacted personnel for a change in priority, but it is still not determined.
    - Q: How much is needed to finish project?
    - A: $165K total to finish project.

- Don Skarr gave an update on his research
    - Goal: Develop a sodium bicarbonate water quality standard for aquatic life.
    - First Part:
        - Conducted research on Fathead minnows because they are ubiquitous.

        - Conducted research on white suckers for a toxicity study.
        - Results indicate white suckers are tougher than the fathead minnow.
    - Second Part:
        - Establish baseline for major ions to relate to toxicity levels and produce a database of major species based on major ion levels.
    - Next Year:
        - Need one more year of data collection to gather adequate information to write proposal.
    - Tasks for 2006:
        - Chronic tests.
        - Acute tests on taxa other than fish (i.e. macro-invertebrates, mussels, etc.).
        - Take results from chronic and acute tests into the field to observe differences from the lab tests.
        - Research on the sauger.
        - Question/Comments:
    - Q: What funding is needed for 2006?
    - A: The funding amount has not been established and depends on various factors. Estimated $100-200K.
    - It would be worthwhile to put proposal out for funding to other agencies.
    - We need to prioritize and obtain funding to answer the questions we want answered from this project.
    - We need broader, more encompassing data.
    - Q: Any reportable information on walleye (and other fish species) within the progress reports?
    - A: No, but there has been research conducted on walleye and other fish species. However, it is not in a reportable format at this time. This information could be added to the final report on this project.
    - Need research on different taxa.
    - Q: Is this research tailored to WY?
    - A: It is site specific to MT, but could be applicable to WY.
    - Q: Have you searched for similar studies to make the study more robust?
    - A: Yes, some studies are available, but not based solely on sodium bicarbonate.
    - Q: When will progress report be submitted?
    - A: In 2007.
    - Comments were made on the impacts of changing flows on sites. Those impacts depend on the stream and its flow. Moreover, there is a lack of information on low flow equations.
    - It was suggested that dilution be analyzed day by day because averages can be affected by cfs.

- Bob Bramblett and Windy Davis gave a power point presentation: “Potential Effects of CBNG Activity of Fish Assemblages, Progress Report”.
    - Gave general background of previous prairie fish studies throughout MT.
    - Current study’s background:

        - Fall 2004-Windy's MS project began.
        - Spring 2005-Field reconnaissance to plan field study.
        - Summer 2005-Windy's first field season.
        - Literature Review-planned to be completed by the end of 2005. However, there is limited data on CBNG effects to fishes.
    - Field Study
        - Goal: Determine if CBNG development has affected fish assemblages in tributaries of the Tongue River and Powder River.
        - Analyzing:
            - Treatment vs. Control,
            - Before and After,
            - Historical Comparison, &
            - Longitudinal Distribution.
    - Windy presented the study site selection, field methods, and preliminary results on all four areas of the analysis.
- Questions/Comments:
    - Q: Have you looked at other components, other than species richness?
    - A: Yes, they have analyzed data with the IBI. They chose species richness for this presentation, because of the lack of difficulty in preparation.
    - Q: Is funding needed to complete the project?
    - A: The project is fully funded by DOE, BLM and MSU.

- Brad Schmitz gave an update on MT FWP inventory/monitoring.
    - Focused on 10 different sites within the CBNG analysis area.
        - Sampled for fish and water quality two times a year.
        - Sampling was affected by high flows.
        - Discussed that CBNG development is not a focus for FWP and that it should be. Furthermore, there were comments on the importance of Windy's research for management decisions.

- Lunch Break 12:00

- Continued at 1:10

- Discussed frequency of monitoring, reports, and funding for next year:
    - Discussion revolved around USGS and WFGD monitoring.
    - Interpretive final report will be completed by ?
    - Need to establish frequency of monitoring.
    - Waiting on funding for future sampling.
    - Joe asked for suggestions on monitoring frequency.
- Questions/Comments/Suggestions:
    - Need to sample fish and inverts every year, but not for habitat.
    - Major ions could be included in the yearly monitoring.
    - Algae could also be included.

- Depending on the available funding, it would be advantageous to continue at least one more year of data collection (taking into consideration flows and irrigation).
- Two years of data collection would be minimal for monitoring.
- Paul suggested that a fact sheet report be produced this year. The final report could be produced at a later date.
- Continue collecting baseline data for 2006 and possibly discuss frequency of monitoring and final reports next winter.
- Funding is limited to analyze existing data.
- There are concerns that such an expensive report will not answer the questions ATG needs to have answered.
- Q: How will doing a Fact Sheet Report cut costs?
- A: Costs will be reduced to a small fraction, approximately $10-15K maximum. The primarily costs will be printing and publication costs, depending on how data is presented. The $10-15K cost is for the fact sheet, not the interpretive report. A fact sheet will report on methods used, sites sampled, number of samples to each type of lab, etc., but will not contain any interpretation of the data. Dave Peterson will need to provide costs for the interpretive report, which were included in the original proposal to the BLM (approx. $150-165K).
- If we continue future aquatic monitoring at the same level as 2005 monitoring, the cost will be $300-$350K per year.
- Discussed priorities and objectives relative to the importance of historical data.
- Joe read the purpose and objectives from original ATG monitoring plan.
- Historical data is important, but limited.
- Q: Is developing the historic component more important than monitoring for next year?
- Q: What are the costs for each?
- Baseline data is important and needed for future reference.
- Supervisors and funding agencies will want a report to assess and provide further funding.
- USGS has limitations on releasing data without analysis.
- Disclaimer could be written to caution public about data.
- Fact Sheet Report should include today's presentations.
- Historical analysis costs: approximately $30-$40K.

- Four options were voted on, based on the funding that the ATG has applied for ($200K) in 2006:
  1. Produce a fact sheet report. Remaining funds would go to fish, macro-invertebrate and major ion sampling for 2006 (i.e. data collection for one field season). USGS will complete this work.
  2. Produce a final report (with historical data) and a fact sheet.
  3. Produce a fact sheet with GIS analysis on the Powder River. The remaining funds would go to major ion, fish and macro-invertebrate sampling in 2006.

4. Produce a fact sheet and historical analysis. Remaining funds would go to major ion, fish and macro-invertebrate sampling in 2006.

- Option 1 7 votes
- Option 2 0 votes
- Option 3 0 votes
- Option 4 0 votes

- Questions/Comments:
  - Q: Do we want to include relative abundance for 2006 or not?
  - A: This will be addressed later. Need more information before a decision is made.

- Discussed amphibian and reptile sampling:
  - Funding has not been a priority.
  - Main issues: (1) which group should be concerned in monitoring herptiles. (2) Funding.
  - It was suggested that aquatic and wildlife groups should divide the work, relative to habitat, but it is difficult to define how to divide the work.
  - Regardless of the ATG's expertise on herpetology, funding should be sought out for sampling.
  - Some kind of research project would be beneficial.

Conclusion Comments:

* USGS will take the lead on the fact sheet report, because they have funding left over from the water fact sheet report. USGS has set a deadline of 12/9/05 for the USGS fact sheet to enter colleague review. Peter Wright is the lead author with guidance from Dave Peterson. The fact sheet should be approved by early January.

* The fact sheet will include information from all of the presentations given today.

* Everyone (USGS, FWP, Don Skaar, WFGD, and MSU) will create their own mini-fact sheets and send them out to the ATG for review. USGS will then create one fact sheet for all of the partners involved in the ATG monitoring plan. These fact sheets will be added to our online version, and a version number assigned. This is the most expedient option when publishing through USGS. Copies can be printed as needed.

* Individual fact sheets need to be completed by the end of January.

* Joe will complete a funding itemized sheet to determine future funding needs for 2006.

* Before the next meeting, Joe will be emailing information on “subgroups” with objectives. ATG members can sign up for individual subgroups.

* It was suggested that the water committee be present in the future. Joe will check if Andy Bobst could be the representative.

* Al Zale offered Bob Bramblett’s fish expertise to conduct fish ID. A proposal will be written on the cost of the ID work.

*Joe will check with Bryce Maxwell on the herptile subgroup.

The monitoring plan will be updated at the next meeting.

- Next meeting:
  - **Dates—Monday, February 6 (starting at 1 PM) and Tuesday, February 7.**
  - Location—Billings

Meeting ended at 3:30 pm.