

DRAFT (pending ATG member review and additions - in progress)

**AQUATIC MONITORING TASK GROUP FY 2004 PROGRESS REPORT AND
ACTION PLAN (prepared November 2004)**

A few members of the Aquatic Task Group (ATG), that was formed to address potential impacts from coal bed natural gas development in the Powder River Basin, met on October 28, 2004 to document progress on the Aquatic Monitoring Plan completed in 2004.

The philosophy of this task group, as reflected in our objectives, is an overall watershed approach to gathering biological baseline (existing condition) information to be used, in conjunction with other pertinent data, as reference to determine effects of CBM development in the respective drainages. In this regard, our philosophy is that sampling site locations should not be dictated by any particular CBM activity or funding entity, but rather from a collaborative goal to establish sites where the most comprehensive data feasible can be gathered to determine resource impacts over time.

At the time of this report, the Buffalo Field Office BLM has requested funds to initiate the ATG's recommendations as submitted to IWG in June 2004. It should be recognized that the ATG recommendations encompass both Montana and Wyoming and should be considered the "minimum" number of survey sites that the task group felt could reflect the conditions of the watershed and monitor potential changes.

Pending funding, initial findings, and supplemental data gathered to date, additional sampling sites could be recommended for addition to the sampling plan. Prioritization of sites and sampling schedule can also vary (i.e., the recommendations and ATG plan is meant to be dynamic), although consistency and long-term trends are considered most important in this assessment.

We recommend that industry and other entities (state and federal agencies, private consultants, etc.) may gather additional data (at their cost) for consideration by the ATG in the assessment of CBM development impacts, but ATG protocols should be applied for consistency in data analyses and assessment of impacts.

Status of funding (as of November 1, 2004):

-Buffalo Field Office BLM, requested funds to start study for FY 2006 (Oct. 1, 2005 to Sept. 30 2006). The total amount requested is \$721,060 for FY2006, 07, 08, and 2010, based on the ATG's cost estimate of \$217,530/year (MT an WY combined). The cost includes funding a 3-year term fish biologist position to supervise 3 summer technicians, collect information from other agencies/ groups, and to assemble the results of the surveys. Funding request for FY2006 is \$217,530 to initiate all of the macroinvertebrate, fish and habitat assessments sites recommended for Montana and Wyoming. In FY 2007 and 2008 funding requested is for \$143,000/year to resurvey 2006 macroinvertebrate and fish sites only. Funding for habitat/ stream morphology was only requested for FY06 and

FY10 on the assumption that adequate stream morphology and habitat assessment could be obtained over longer intervals.

Because of unknown impacts to aquatic habitat from CBNG development, no funding is requested in FY2009. Full funding in 2010 for \$217,530 is requested to reread previous fish, macro, and habitat surveys.

The funding request does not include money for research proposals described in the monitoring plan.

Actions for ATG consideration pending funding request approval and supplemental funding:

The ATG believes the BLM funding request might be the catalyst for initiating this survey and the BLM the most logical entity to administer the project since it crosses state lines and reflects the intent of the Powder River Basin Oil and Gas EIS. Supplemental funding and in-kind contributions (state, industry, etc.) could be provided, via the BLM, to assist with funding needs. Since preparation of the initial ATG plan, additional costs have been identified and supplemental funding will be needed, or tasks reduced relative to funding available. Recognizing that the BLM request may not be approved, or only partially approved, the ATG should consider the following actions to encourage funding:

-If BLM request is not funded or only partially funded:

1. The ATG will reprioritize sites or level of effort.
2. BLM will seek supplemental funding from sources such as:
 - a. EPA's Consolidated Funding Program
 - b. USGS funding or contract to do sampling (contracting)
 - c. Other agencies (i.e. State agencies, Forest Service, etc.
 - d. Others?
3. May pursue funding to begin monitoring in 2005
 - a. EPA's Consolidated Funding Program

Additional funding considerations:

- Cost estimates noted on the spreadsheets of the ATG plan are less than the total reported in the umbrella statement due to refinements in the estimated cost for conducting fish, macroinvertebrate, and aquatic habitat surveys. The ATG will be reviewing these estimates again to assess their validity in light of more information on what this level of survey effort may cost.

-Cost estimates in initial ATG plan may be unrealistically low or not inclusive enough:

1. More days may be required to do site work (gathering macros, fish, habitat and stream channel morphology will likely take longer than initially anticipated).
2. Initial costs do not account for end of season report preparation and compilation.

3. More sites may be needed (for instance, present plan is set up for gathering baseline data – not monitoring specific CBM discharge sites).
4. The ATG recommended all 3 components (macros, fish and habitat) be conducted annually. The BLM funding request does not include habitat for FY07 and FY08. Additional funding to cover annual habitat assessments should be pursued if this assessment is warranted.

- ATG should prepare a cost addendum for the plan before 2005.

In-kind contributions to consider for matching BLM budget request:

1. Request WY and MT State wildlife agency and DEQ personnel help to train BLM funded full time term (3 yr.) fish biologist and 3 summer temporary technicians on survey protocol. BLM will handle monitoring as proposed with funding request submitted.
2. Document 2004 accomplishments by DEQ, WGFD, MT. FW&P, BLM (WY & MT), USFS, USGS, Universities, and private consultants.

ATG actions still pending prior to survey initiation (winter of 2004/2005):

-Need to complete fish survey protocol via examination of state and federal protocols.

-Quality assurance/ control component needs further development (defensible protocols).

-Need to consider thresholds or “triggers” (what constitutes change, etc.). This is requested in EIS and needed to determine adaptive management actions – but very difficult to determine without sufficient information in existing condition and natural variability. Seek outside (Universities, literature) advice?

-Document existing information to use for baseline:

1. MSU literature search (funded in 2004).
2. Patton fish study
3. 2004 and previous State wildlife and DEQ, BLM, USFS, USGS information.
4. Others??

CALENDAR 2004 ATG ACCOMPLISHMENTS AND COSTS

-Prepared and submitted initial Aquatic Biota Monitoring Plan in June 2004. Followed up with Power Point presentation to IWG in Buffalo on June 16, 2004.

-BLM initiated funding request for FY 2006 for \$217,530 (catalyst for supplemental cost-share funding).

-Wyo. Game and Fish (WGFD) completed 7 sample sites monthly (May through October) for fish/ habitat on main stem of Powder River, 2 sites on Crazy Woman creek, above and below major tributaries (Clear, Crazy and Salt creeks). WGFD amphibian monitoring team collected info. on Powder, Cheyenne, Little Missouri, and Belle Fourche Rivers.

-Wyo. DEQ completed water quality, qualitative habitat and macro sampling above, within and below Burger draw.

Prior to 2004:

1. 18-20 monitoring sites downstream from Interstate 90 in 2000.
2. Monitoring sites on Clear and Crazy Woman creeks in 1999.
3. Scattered sites on Spotted Horse and Prairie Dog creeks.
- 4.

-USGS (request from Dave Peterson) on NAWQA and EMAP sites.

-MT. FWP and MT DEQ request for previous monitoring (Joe Platz to collect).

-Confluence Consulting Study -Request final report from Powder River Basin Resource Council and site reference.

-WY BLM compiled anecdotal field observations of fish during permit monitoring.

-USFS (Medicine Bow NF) conducted stream surveys on Antelope creek, Cheyenne and Little Powder Rivers.

-BLM funded research proposal to MSU (\$30, 000) to do literature search.

-Others? Need to list things we are aware of so we can begin gathering information together and help us determine data gaps, needs, additional (or change in) sites.