



United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137

NOV - 2 2005



IN REPLY REFER TO:

MT-434

PRJ-18.00

Richard Rosenberg
Gibson Dam Hydroelectric Company, LLC
3633 Alderwood Ave.
Bellingham, WA 98225

Subject: Bureau of Reclamation's Comments on the Draft Study Plan for Gibson Reservoir and Sun River Water Quality Monitoring, Gibson Dam Hydroelectric Project – Federal Energy Regulatory Commission (FERC) Project No. 12478, Sun River Project, Montana

Dear Mr. Rosenberg:

Thank you for the opportunity to review the Gibson Dam Hydroelectric Corporation's Draft Study Plan for Water Quality Monitoring for the Gibson Dam Hydroelectric Project. Enclosed are Bureau of Reclamation's comments on the Plan for your consideration.

Please contact Steve Davies at 406-247-7322, or Email at sdavies@gp.usbr.gov, if you have any questions regarding our comments.

Sincerely,

Richard Long, Manager
Facility Operation & Maintenance Division

Enclosure

cc: Mr. Bob Hardin, Manager
Greenfields Irrigation District
P.O. Box 157
Fairfield, MT 59436

Secretary
Federal Energy Regulatory Commission
Office of Energy Projects
888 First Street NE
Washington, DC 20426

Rec'd
11-6-05
JW

**Reclamation Comments on Draft Study Plan for
Gibson Reservoir and Sun River Water Quality Monitoring
Gibson Dam Hydroelectric Project
FERC Project No. 12478**

The following provides Reclamation's comments on the September 29, 2005 Draft Water Quality Study Plan for Gibson Dam Hydroelectric Project, FERC Project No. 12478 (submitted electronically to Reclamation by Dick Rosenberg of Whitewater Engineering):

1. General Comment – The Montana DEQ and Sun River Watershed Group are very active in the watershed and have many water quality measuring stations already developed. Reclamation suggests working closely with these agencies to prevent duplication of data collection and to ensure compliance with State Standards.
2. Page 1, Introduction and Background: The Introduction and Background indicate that the purpose of the Draft Study Plan is to describe proposals for performing temperature monitoring only for Gibson Reservoir and portions of the Sun River downstream of Gibson Dam. These sections also indicate that Draft Plans for other water quality parameters (e.g., dissolved gasses, turbidity, suspended sediments, etc.), will be developed. The remainder of the document describes how the developer intends to study various water quality parameters. Suggest clarifying the purpose of this document within the Introduction and Background sections as it appears that this will be the only plan for studying water quality.
3. Page 1, Study Objectives: Bullet 3 suggests that the proposed development will change or alter project operations to “optimally meet both developmental and non-developmental needs”. Please identify and describe all “developmental and non-developmental needs” within the Draft Study Plan. While development of the proposed project may provide an additional outlet from which to make releases from the dam from (i.e., the power penstock outlets), development of this project cannot alter the authorized purposes of the Sun River Project.
4. Page 2, Proposed Study Areas, Gibson Reservoir: This section indicates that water temperature surveys will be conducted in three primary locations, but only two sites are identified. Please identify the third location.
5. Page 2, Proposed Study Areas, Sun River: This section mentions that *several* locations will be monitored downstream of Gibson Dam. The term “several” is vague. If more information is known, please include. It is also mentioned that sites will be chosen by agency personnel. Please identify the agencies that will be responsible for identifying monitoring locations. Refer also to comment No. 7 below.

6. Page 3, Sampling Equipment and Methods: This section states that water temperature monitoring will be completed using "Optic Stow Away" loggers, which supports monitoring for 661 days before data is downloaded. That leads the reader to assume these may be deployed for that period without required maintenance, calibration, etc. Please identify anticipated maintenance requirements and how equipment calibration will be handled. Quality assurance should be addressed for other monitoring components as well.
7. Page 3, Sampling Equipment and Methods: Please describe how all equipment will be installed, maintained, and accessed throughout the monitoring period. Details of any ground disturbing activities must be provided prior to installing any equipment so that appropriate National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) compliance activities can be completed.
8. Pages 3 & 4, Gibson Reservoir and Sun River Temperature Monitoring: Please identify how researchers intend to deal with winter weather conditions while collecting data on the reservoir and river. For example, the Draft Plan indicates that access to the loggers on the reservoir will be by boat. This is not possible during the winter months.
9. Page 4, Gibson Reservoir Surface Water Temperature Monitoring: Please identify how researchers will monitor reservoir temperatures with a fluctuating reservoir level.
10. Page 6, DO: This section indicates that DO will be measured approximately on a quarterly basis. DO is likely to fluctuate significantly over the summer months due to varying algae growth in the system, nutrient inputs, water temperature, reservoir stratification and other conditions. A snapshot every 3 months does not appear adequate to assess DO concerns.
11. Page 6, OTHER WATER QUALITY PARAMETERS: The section indicates that other water quality parameters (several are listed) will be determined during study planning. Is this "study planning" the water quality study planning or the overall project study planning? Please clarify.
12. Page 7, REPORTING: Reclamation requests copies of all reports documenting the results of water quality monitoring studies.