Public Scoping Summary Report

Intake Diversion Dam Modification
Lower Yellowstone Project, Montana,
Environmental Impact Statement

January 2009
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**Introduction**

This report compiles public and agency comments received during the formal scoping process for the Intake Diversion Dam Modification, Lower Yellowstone Project, Montana, Environmental Impact Statement (Intake EIS). It begins with background information on the proposed project, explains the scoping process, and summarizes comments gathered by the joint lead federal agencies for consideration in preparing the Intake EIS. It also includes summary responses to substantive comments and describes a new action alternative developed in response to comments.

**Intake Diversion Dam Impedes Fish Passage on the Lower Yellowstone River**

The Department of the Interior, Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (Corps) are jointly preparing an EIS to analyze and disclose effects associated with proposed modifications to the Intake Diversion Dam and irrigation canal headworks. The proposed federal action would modify Intake Diversion Dam and canal headworks, features of Reclamation’s Lower Yellowstone Project. The proposed project would improve passage for endangered pallid sturgeon and other native fish in the lower Yellowstone River and reduce entrainment in the Yellowstone Project Main Canal.

Reclamation constructed the Lower Yellowstone Project under the Reclamation Act/Newlands Act of 1902. The Corps is a joint lead for the Intake EIS, because the U.S. Fish and Wildlife Service (Service) recommended in their Missouri River Master Manual biological opinion (2000 with 2003 amendment) that the Corps work with Reclamation in providing passage for pallid sturgeon at Intake Diversion Dam as a conservation recommendation. Section 3109 of the 2007 Water Resources Development Act authorizes the Corps to use funds appropriated to carry out the Missouri River Recovery and Mitigation Program to assist Reclamation in the design and construction of Reclamation’s Lower Yellowstone Project of Reclamation for the purpose of

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**Entrainment** means to carry along in a current. In this case fish are involuntarily carried by water flowing into the irrigation canal system through an unscreened intake.
ecosystem restoration. Reclamation is the administrative lead for the National Environmental Act (NEPA) compliance activities during preparation of the Intake EIS.

Cooperating agencies for preparation of the Intake EIS include the Montana Department of Environmental Quality; Montana Department of Natural Resources and Conservation; Montana Fish, Wildlife, and Parks; and the Service. The Environmental Protection Agency (EPA) was invited to be a cooperating agency but declined the invitation due to lack of agency resources, current workload, and other program commitments. Other agencies are under consideration as cooperating agencies and may be added.

**Background**

Reclamation’s Lower Yellowstone Project is located in eastern Montana and western North Dakota. Intake Diversion Dam is located near Glendive, Montana, approximately 70 miles upstream of the confluence of the Yellowstone and Missouri rivers.
Construction of the Lower Yellowstone Project began in 1905 and included Intake Diversion Dam (also known as Yellowstone River Diversion Dam) – a 12-foot (ft) high wood and stone diversion dam that spans the Yellowstone River and diverts water into the Main Canal for irrigation.

The best available science suggests Intake Diversion Dam impedes upstream migration of pallid sturgeon. Currently pallid sturgeon may attempt to spawn below Intake Dam, and newly-hatched pallid sturgeon may drift into Lake Sakakawea before they are able to swim, where their survival rate is low. The proposed project would aid in recovery of pallid sturgeon by opening 165 additional miles of the Yellowstone River and its tributaries for spawning. In addition, installation of a fish screen would minimize entrainment of pallid sturgeon and other native fish in the Main Canal. Currently, research conducted by Reclamation and others indicates that thousands of native fish are being unintentionally trapped in the main irrigation canal.

The Service listed the pallid sturgeon as endangered under the Endangered Species Act (ESA) in 1990. The wild population of pallid sturgeon in the Yellowstone River and Missouri River between Fort Peck Dam and Lake Sakakawea is predicted to be locally extinct by 2017 if reproduction and recruitment of young fish does not improve.

The lower Yellowstone River is considered to be one of the best opportunities for recovery of pallid sturgeon. Section 7(a)(1) of the ESA authorizes all federal agencies to use their resources for the conservation and recovery of federally listed species, and under Section 7(a)(2) to ensure that federal activities do not jeopardize the continued existence of any federally listed species.

**Proposed Action**
The proposed Federal action is to modify Intake Diversion Dam and canal headworks, features of Reclamation’s Lower Yellowstone Project, to improve passage for endangered pallid sturgeon and other native fish in the lower Yellowstone River and reduce entrainment in the Main Canal.

**Purpose and Need for Proposed Action**
The purpose of the proposed action is correct unsatisfactory passage conditions for endangered pallid sturgeon and other native fish in the lower Yellowstone River and to reduce entrainment in the Main Canal.

The proposed action is needed to:
- improve upstream and downstream fish passage for adult pallid sturgeon and other native fish in the lower Yellowstone River,
- minimize entrainment of pallid sturgeon and other native fish in the Main Canal,
- continue effective operation of the Lower Yellowstone Project and comply with the Endangered Species Act,
- and contribute to restoration of the lower Yellowstone River ecosystem.
Alternatives Presented in Public Meetings
Prior to public scoping Reclamation and the Corps identified five fish passage alternatives and two fish screen options. These were presented in public meetings held in October 2008 for public comment. The alternatives included no action, four fish passage alternatives, and two fish screen options.

No Action Alternative
No Action is the future operation of the Lower Yellowstone irrigation project without implementation of any of the proposed fish passage alternatives or fish screen options. No Action for this project means maintaining the diversion dam and continuing to divert water for irrigation as authorized.

A fish screen would not be constructed and pallid sturgeon and other native fish would continue to be trapped and lost in the Main Canal. The irrigation district would maintain the dam by periodic placement of rock via the overhead cable system. Maintenance of the crest of the dam is required after high river flows or ice damage. Upstream passage for pallid sturgeon and other native fish would continue to be affected by the diversion dam. Reclamation would be obligated by Section 7 of the ESA to continue consultation with the Service on the effects continued operation of the irrigation project may have on federally-listed species.

Fish Passage Alternatives
Rock Ramp Alternative  Rock ramps have been used elsewhere as fish ladders to help fish swim over relatively low dams. To modify the existing Intake Diversion Dam for fish passage, fill and rock would be placed downstream to flatten its slope into a ramp. The ramp would extend downstream from the dam approximately 200 to 2,000 feet, depending on the final slope and configuration. It would reduce flow speed and turbulence over the dam to levels tolerated by pallid sturgeon and other native fish. The rock ramp would mimic the characteristics of a riffle-pool sequence. A riffle is a place in a stream where rushing water forms small rippled waves over rocks. A pool provides a resting place for fish trying to swim over the ramp. The rock ramp would be constructed to simulate natural riffles and pools in the Yellowstone and Missouri Rivers.

To create the rock ramp, the existing timber and rock dam would be replaced with a reinforced concrete weir to improve structural integrity and reduce seepage. A weir is a small dam used to slow water and raise the water surface for diversion into a canal. The ramp would have either concentric boulder weirs arranged in steps or a smooth slope. The rock ramp would be designed to meet velocity and depth criteria under a wide array of flow conditions. Boulders could be incorporated to break up flow and provide resting places for fish as they swim over the ramp. Rock could be grouted along the crest of the structure and down the ramp to protect against ice damage.
Relocate Diversion Upstream Alternative  This alternative would relocate the diversion point for the canal approximately 2 miles upstream to take advantage of the natural slope of the lower Yellowstone River. Moving the diversion upstream would enable the irrigation district to divert sufficient water to meet irrigation demands (maximum of 1,374 cubic ft per second) under most flow conditions. The existing Intake Diversion Dam would be removed.

A new 2-mile section of irrigation canal would be constructed along the existing Yellowstone Valley Railroad to connect to the original irrigation canal. Two crossings beneath the tracks would use inverted siphons with five 8-ft diameter concrete pipes per siphon. A new drop structure would be built to join the new canal to the existing irrigation canal. Most of the canal construction would require a 60-ft cut through a steep hillside removing 3.7 million cubic yards of soil. To protect the new canal from flooding and sediment runoff, levees would be constructed along the floodplain.

In order to divert water during low summer flow, more diversion pipes and screens would be needed than at the existing canal intake. The Yellowstone River channel would be modified substantially to maintain optimal channel depth adjacent to the canal intake. Rock structures, such as river training dikes and revetments, would be constructed near the new canal intake and upstream to maintain the channel. Several rock sills (lines of rock in the bottom of the river) spanning the width of the river would prevent vertical erosion after dam removal. During periods of extreme low flows or droughts it is likely that temporary weirs or channel work would be necessary to maintain sufficient diversion capacity for the canal.
Relocate Diversion Upstream Alternative

Relocate Main Channel Alternative  This alternative would relocate the main channel of the lower Yellowstone River near Intake, Montana, to bypass the Intake Diversion Dam. It would approximately follow the alignment of an existing side channel. A newly-constructed channel would carry Yellowstone River flows around the diversion dam. Approximately 3–4 miles of the side channel would be excavated 600-ft wide by removing 5–8 million cubic yards of fill to form a new main channel.

The new main channel would be excavated to mimic the former main channel; however, without a diversion dam to back-up water, a structure would be constructed in the river at the entrance to new channel to ensure reliable diversions to the irrigation canal. The point of divergence of the new channel is under consideration, but it would converge with the existing channel near the Yellowstone River’s current confluence with the side channel. A new inlet to the irrigation canal (headworks and control structure) would be constructed where the new main channel diverges from the existing channel.

The new main channel would have several stabilized rock sills extending across its full width to prevent vertical erosion, along with several other rock points and revetments to maintain shape, location, and function under a variety of flow conditions. Most of the former main channel would be filled and the remainder would be used to deliver water to the Lower Yellowstone Project irrigation canal. The irrigation inlet would be engineered to divert water during low flow and to protect against erosion. Levees would be built along the floodplain to protect against flood damage and sedimentation.
Single Pumping Plant Alternative  This alternative would remove the existing Intake Diversion Dam and replace it with a new pumping plant with the capacity to pump 1,400 cubic feet of water per second into the irrigation canal. The pumping plant would be constructed near the location of the existing intake and could pump water into the canal without a permanent diversion dam.

To ensure pumping operations during normal summer flows, the river channel would be stabilized and maintained adjacent to the pumping plant. Several stabilized rock sills spanning the width of the Yellowstone River main channel would inhibit the main channel from moving away from the plant. Rock dikes and other rock structures would be constructed in the vicinity of the new pumping plant and upstream to maintain the channel and prevent erosion that could occur after removing the dam. During periods of extreme low flows, it is likely that temporary weirs or some type of structure in the channel would be necessary to maintain sufficient diversion capacity for the canal.

To operate the pumps, a new high-power transmission line and transformer yard would be built to connect the plant to the local power grid. A new high-capacity generator would be placed on-site to provide backup power in the event of a power outage. Preliminary evaluation of the pumping plant estimates an annual power demand of 7,000,000 kilowatts per hour per year. The pumps and motors in the plant would require routine maintenance approximately once every 8 years with total replacement occurring once every fourth maintenance cycle (or every 32 years).
Fish Screen Options
Removable Rotating Drum Screen Option A fish screen option that could be used if a new canal intake is constructed is the Removable Rotating Drum Screens Option. Drum screens with 1.75 millimeter (mm) stainless steel wedge wire mesh would be installed on the river side of the intake canal to keep fish out of the irrigation system. Fourteen 6-ft diameter drum screens, each approximately 20-ft long, would cover the outside of the canal intake structure. To prevent damage by the severe ice jams typical of the lower Yellowstone River during early spring, each screen would slide on a track that could be raised and lowered manually using a winch.

Each screen would have fixed brushes on the inside and outside; the drum would rotate against the brushes to prevent clogging. The manifold inside each screen would connect to a trash rack on the canal intake when the screen is in its lowered position. The riverward location of the removable screens would eliminate the need for an additional trash rack, as well as a bypass pipe, because fish would stay in the main river channel. Individual screens could be removed for maintenance while canal operations continue. A trash rack and bypass pipe would not be needed.
V-Shaped Fish Screen Option  A V-shaped, flat panel screen fish screen could be installed inside the canal. This design is commonly used in the western and the northwestern United States to keep fish out of irrigation systems. Stainless steel wedge wire mesh (1.75 mm) in the screen would block adult and juvenile fish from entering the irrigation system.

Fish biologists also recommend inclusion of a “trash rack” facility on the river-side of the existing canal intake. The trash rack would consist of parallel bars cleaned by a rake which slides in grooves. It would block large debris and adult and large juvenile fish from entering the canal and being exposed to the screen. The V-shaped screen and trash rack would have automated cleaning devices (a walking brush, spray cleaning system, rake system, and conveyor) to prevent clogging. A 48-inch bypass pipe would return fish to the main river channel from the screen if they make it through the trash rack.

Scoping Summary

Public Involvement Process
Scoping is an important part of the NEPA process. It serves as the public’s opportunity to provide input and direction on the Intake EIS throughout its preparation. Reclamation and the Corps developed a public involvement strategy that included publishing a Notice of Intent in the Federal Register, holding three formal public scoping meetings, meeting with state and federal agencies, distributing newsletters, mailing scoping information to agencies and the public, contacting tribes, forming a cooperating agency team, issuing news releases, posting information on a website and distributing this Public Scoping Summary Report.

Input analyzed for this report came from the following:
1. Series of open houses and public scoping meetings held from 5:30 – 8:30 PM in three locations in Montana. The meetings were at the Community Services Building in Sidney on October 21, Dawson Community College in Glendive on October 22, and Montana State University Downtown Campus in Billings on October 23.

2. Public field trip to Intake Diversion Dam at 2:30 PM on October 22
3. Consultation meetings with federal, state, and local agencies in Montana

4. Cooperating agency team meetings

5. Written comments submitted by agencies, organizations, and the public.

6. Comments submitted online through the web site.

The initial scoping period was originally scheduled to end on November 14, 2008, but was extended to December 15, 2008, in response to requests for additional time for comments.

**Issues**

During public scoping a total of 46 letters and e-mails were received in addition to the oral comments presented at three public scoping meetings. All comments were carefully considered by the interdisciplinary team. A total of 222 comments were identified and grouped into 18 issue categories.

The issue categories were air quality, alternatives, aquatic resources, Clean Water Act, climate change, cumulative effects, environmental justice, ESA, fish and wildlife, historic properties, hydrology and geomorphology, Indian trust assets, natural resource lands, NEPA, recreation, socioeconomic, water conservation, and water quality. This section summarizes those comments and responses to them.

**Air Quality Analysis**

**Comment:** Provisions for air quality analysis should be included in the Intake EIS.

**Response:** The effects of the alternatives on air quality will be evaluated.

**Alternatives**

**Comment:** A number of comments suggested revisions to the four alternatives described at public meetings. The proposed revisions included modifying the rock ramp design, providing gravity flow diversion along with pumping, and assessing different locations and types of fish screens. A question was raised about the source of rock for the ramp, and it was suggested that the rock be acquired in Montana.

**Response:** All of the suggested revisions are being considered by the design engineers and some modifications that would meet the purpose and need of the project or minimize impacts are being made in response to these suggestions. Regarding the rock, the specific sources of rock, if any rock is needed, would be identified by the construction contractor after a construction contract is awarded. This only would occur if an action alternative requiring rock is selected in the Record of Decision. The rock must be from an approved source. A source would not be approved until the NEPA and National Historic Preservation Act Section 106 compliance is completed and any environmental and cultural resource impacts evaluated, avoided or mitigated, if necessary, prior to acquisition of the rock.

**Comment:** Several new alternatives were offered. One would construct individual irrigation pivots and pumping systems for landowners that currently use the canal system, use groundwater
rather than surface water for some pivots, and offer an optional “non-irrigate” clause to irrigators. Another would capture fish below the dam and relocate them above the dam or release fish hatchery sturgeon above the dam.

**Response:** Regarding the new ideas for alternatives, all alternatives were screened using specific criteria. If an alternative meets all of the criteria, it will be evaluated in the Draft Intake EIS. The criteria are:

1) Provide upstream and downstream fish passage for adult pallid sturgeon and other native fish in the lower Yellowstone River.
2) Minimize entrainment of pallid sturgeon and other native fish into the main canal.
3) Continue effective operation of the Lower Yellowstone Project as authorized and in compliance with the Endangered Species Act.
   - Alternative does not adversely impact the ability of the Lower Yellowstone Project to meet crop irrigation requirements.
4) Contribute to restoration of the lower Yellowstone River ecosystem.
   - Reconnecting the Lower Yellowstone River from the confluence of the Missouri River, past the Intake Diversion Dam, upstream to the next barrier at Cartersville Dam near Forsyth, Montana, would allow migration of aquatic species, including endangered pallid sturgeon and other native fish.
5) Alternative not redundant or similar to other alternatives.
6) Alternative not prohibitively greater in cost or in environmental impacts than the other alternatives.

Using these criteria, one new alternative was identified for consideration – Multiple Pumping Stations Alternative. This alternative would use multiple pumping units grouped at suitable locations along the river, parallel to the district canal system. Water would be pumped through pipelines into the Main Canal and/or laterals and would be available for irrigators to access directly from the pipeline. The pumping units could consist of a combination of self-cleaning floating screens with electric-powered pumps, trailer-mounted pump and motor units, and/or submerged screen intakes. The pumping units would be movable, allowing access to the river channel in the event of channel migration.

**Comment:** There were a number of concerns about the alternatives. Damage to the new proposed structures by ice, flood waters, and debris was an issue mentioned in some comments, while concerns about operation during low flow were raised in others.

Some questioned the cost of the project, and asked who would pay for construction, operation, and maintenance. Irrigators expressed a need for a reliable water system.

Local property owners were afraid of impacts to their property. Many wanted the dam and irrigation intake left alone.

**Response:** Protection against ice and debris damage and operation during extreme low flow are being considered in designing alternatives.
The Corps would fund construction of the proposed project, if an action alternative is selected in the Record of Decision. The Water Resources Development Act of 2007 - Lower Yellowstone Project, Montana Section 3109 provides the Secretary of the Army discretionary authority to use funds appropriated to carry out the Missouri River Recovery Program to assist the Bureau of Reclamation in the design and construction of Reclamation's Lower Yellowstone project located at Intake, Montana, for the purpose of ecosystem restoration. Funding for operation and maintenance of the proposed Project has not been decided. A reliable water system is recognized as one of the needs for the project in continuing effective operation of the Lower Yellowstone Project as authorized.

Effects to private lands and measures to avoid, minimize, or mitigate impacts will be evaluated in chapter four of the Intake EIS. Leaving the dam and irrigation alone are part of the No Action Alternative, which will be evaluated in the Intake EIS.

**Aquatic Resources**

**Comment:** Several individuals commented that they believed that very few fish are entering the canal now, and therefore, a fish screen is not needed.

**Response:** Previous studies have estimated the number of adult and larval fish entering the canal. These studies will be used to describe existing conditions in chapter three of the Intake EIS and to evaluate the effects of the No Action Alternative in chapter four. The effects of each fish screen option will be compared to No Action in chapter four.

**Comment:** The EIS should evaluate impacts on stream habitat, including bank/channel stability, streambed substrate, spawning and rearing habitats, pools and riffles, and riparian areas.

**Response:** Effects of the alternatives on instream habitat, bank and channel stability, and riparian habitats will be disclosed in chapter four.

**Comment:** The EIS should evaluate effects on the species composition and abundance of fish and other components of the aquatic community. Paddlefish and other important recreational fishery resources should be addressed.

**Response:** The existing aquatic community will be described in chapter three. Biological effects of the alternatives will be described in chapter four. These effects may be related to altered physical habitat in the project area (e.g., due to dam modification or removal), as well as effects outside of the project area associated with improved fish passage. The Intake EIS will evaluate the effects of the alternatives on recreational fisheries, including the paddlefish fishery at Intake.

**Comment:** The EIS should evaluate the flow and habitat needs of the fish species in the Yellowstone River and develop alternatives that protect and enhance habitats and habitat connectivity for these species. Measurable biological objectives and clear biological criteria should be developed to define project success, including the effectiveness of proposed modifications to improve fish passage and reduce entrainment.
Response: The effects of the alternatives on physical habitat in the project area and on habitat connectivity associated with improved fish passage will be described in chapter four. Success criteria for improved fish passage and reduced entrainment will be identified and used to evaluate the effectiveness of alternatives in accordance with an adaptive management plan.

Clean Water Act
Comment: Analysis of the environmental effects of proposed projects should show consistency with the goals and objectives of the Clean Water Act. Integrate 404(b)1 guidelines into the NEPA process. Include a 404(b)1 evaluation of the preferred alternative as an appendix in the EIS. A 404 permit under the Clean Water Act may be required through recapture clause in 404(f)2.

Response: The action alternatives are intended to improve fish passage and thereby eliminate an impairment identified in the State of Montana’s 2006 Clean Water Act Integrated Section 303(d)/305(b) Report. This is consistent with the goals and objectives of Section 404 of the Clean Water Act. The proposed action would aid recovery of the endangered pallid sturgeon while helping to restore the Yellowstone River by addressing the identified aquatic life impairment caused by lack of fish passage at Intake. Potential temporary or long term changes in water quality associated with the construction and operation of fish passage and fish screen features will be evaluated in chapter four of the EIS. An exemption determination cannot be made until a preferred alternative is selected. A 404(b)1 evaluation will be included as an appendix in the Intake EIS, if the preferred alternative requires a 404 permit.

Climate Change
Comment: The EIS should analyze the potential effects of climate change on Yellowstone River flows and how altered flows could affect irrigation diversions and practices.

Response: The Intake EIS will use the best available information to disclose potential effects of climate change on Yellowstone River flows and how altered flows could affect irrigation diversions and practices.

Cumulative Effects
Comment: A thorough cumulative effects analysis should be completed for all resources areas.

Response: Direct, indirect and cumulative effects will be evaluated for each alternative and for each resource. The cumulative effects analysis will include past, present and reasonably foreseeable future projects.

Comment: Are there other dams on the Yellowstone River that are barriers to pallid sturgeon and what will happen to them?

Response: What happens at other dams is outside the scope of this project. However, best available science indicate the Intake Diversion dam is a partial barrier to many species and likely a total barrier to some species. Providing passage at this dam has been identified by the Service as an important link to pallid sturgeon recovery. Other dams being considered for modification to allow fish passage, if any, will be included in the cumulative effects analysis. For example, the Muggli dam on the Tongue River has been modified for fish passage and will be in the
cumulative effects analysis. Discussions are ongoing for the Cartersville Dam and may also be a part of the cumulative effects analysis.

**Endangered Species Act**

**Comment:** Several comments concerned the potential success of trying to address fish passage.

**Response:** Reclamation and the Corps have a long history of building successful fish passage and fish entrainment protection projects. We are working with pallid sturgeon biologists to design successful alternatives. This is the first passage project designed specifically for pallid sturgeon, but projects have been successful for other sturgeon species. We are working with Reclamation’s Science and Technology Program, Corps’ engineers, and pallid sturgeon biologists to find the best possible solution.

The joint lead agencies are using the best science available to design the alternatives. However, we recognize uncertainty and limited predictive capability in dealing effectively with complex river ecosystems and benefitting those ecosystems. Monitoring and/or researching the success of any chosen alternative will be important to project success. Adaptive management principles will be used to manage the uncertainty. Adaptive management plans will follow the recently published *Adaptive Management, the U.S. Department of the Interior Technical Guide*. Adaptive management will be addressed in chapter four of the Intake EIS.

**Comment:** Several comments expressed questions about the ESA, including recovery of endangered species, de-listing, and integration into the EIS process.

**Response:** ESA issues, especially in regard to the pallid sturgeon will be thoroughly evaluated in the Intake EIS, as well as through the Section 7 consultation process under the ESA. Addressing how species are recovered and de-listed is outside the scope of this EIS; however, federally listed species will be evaluated in Intake EIS chapters three and four. A final Biological Assessment necessary for ESA compliance will be included in the final EIS. The final ESA Section 7 concurrence or a Biological Opinion will be completed before a Record of Decision is signed.

The status of the pallid sturgeon and its recovery will be thoroughly discussed in chapters three and four of the Intake EIS, as well as in the Biological Assessment.

**Comment:** Several comments questioned whether the fish passage and entrainment issues are real.

**Response:** According to the best available science, Intake Diversion Dam likely has impeded movements of pallid sturgeon in the Yellowstone River since its construction in 1907 and currently serves as a barrier to wild adult and hatchery-reared juvenile pallid sturgeon.

The first entrainment study was completed in 2000 (*Fish Entrainment at the Lower Yellowstone Diversion Dam Intake Canal, Montana 1996-1998*) by Reclamation in cooperation with Montana Fish, Wildlife and Parks and the Lower Yellowstone Irrigation Project. It is posted on Reclamation's website at http://www.usbr.gov/gp/mtao/lowyellowstone. Another study is currently underway and will be completed prior to issuance of the final EIS.
**Comment:** Several comments concerned pallid sturgeon biology including larval drift, fingerling predation by pelicans or other fish, natural spawning, value of sturgeon, and history of their survival on the Yellowstone River.

**Response:** Details on the life history of pallid sturgeon and native fish status and biology will be discussed in chapter three of the Intake EIS. The impacts of the different alternatives on aquatic resources will be addressed in chapter four. These issues will also be discussed in the Biological Assessment.

**Environmental Justice**

**Comment:** The EIS needs to identify and address disproportionately high and adverse human health and environmental effects on minority populations and low-income populations.

**Response:** Intake EIS chapter three will describe current conditions affecting environmental justice within the area of potential effects of the proposed project. Chapter four will describe any effects of the alternatives on environmental justice issues.

**Fish and Wildlife**

**Comment:** Comments recommended working with state and federal biologists to address all natural resource issues.

**Response:** Both the Service and the Montana Fish, Wildlife, and Parks are cooperating agencies in this effort and will be coordinated with and consulted for their expertise. Additional pallid sturgeon experts will also be consulted.

**Comment:** Comments questioned the issue of fish entrainment.

**Response:** The first entrainment study in the project area was completed in 2000 and is entitled *Fish Entrainment at the Lower Yellowstone Diversion Dam Intake Canal, Montana 1996-1998*. It was completed by Reclamation in cooperation with Montana Fish, Wildlife and Parks and the Lower Yellowstone Irrigation Project. The report is posted on Reclamation's website at http://www.usbr.gov/gp/mtao/loweryellowstone. Another study is currently underway and will be completed prior to issuance of the final EIS. Both studies will be addressed in the Intake EIS and in the Biological Assessment.

**Historic Properties**

**Comment:** The EIS should identify historical, archeological, paleontological, native religious, sacred or other cultural resources that may be affected by dam modification. Potential impacts to the natural, cultural, and recreation resources of the Lewis and Clark Trail should be evaluated.

The Lower Yellowstone Diversion Dam has been nominated for listing on the National Register of Historic Places by local residents.

**Response:** Because the proposed Project is a federal action, it must comply with federal legislation concerning historic properties, specifically Section 106 of the National Historic Preservation Act of 1966, as amended. These resources will be appropriately identified and evaluated in consultation with state and tribal historic preservation offices.
Reclamation agrees that the dam is eligible for listing on the National Register of Historic Places. Reclamation will consult with the Montana State Historic Preservation Office about any proposed impacts to the dam and appropriate mitigation of adverse effects for action alternatives that could adversely affect the dam.

**Hydrology and Geomorphology**

**Comment:** The EIS should evaluate and discuss Yellowstone River hydrology, flow variations, diversions, stability, and geomorphology in the area of the Intake Diversion Dam as well as upstream and downstream.

**Response:** The best available data will be used to assess hydrology and geomorphology upstream and downstream of the Project site.

**Indian Trust Assets**

**Comment:** You need to assess all impacts to tribal trust resources and to consult with tribes.

**Response:** Tribes with potential Indian trust assets in the area of potential effects have been contacted to identify such assets. Indian trust assets are defined as lands, minerals, hunting and fishing rights, and water rights. The identified Indian trust assets will be described in Intake EIS chapter three and impacts will be evaluated in chapter four in consultation with affected tribes.

**Natural Resource Lands**

**Comment:** The Environmental Protection Agency considers the protection, improvement and restoration of riparian areas to be a high priority. Cottonwood galleries are a riparian resource worthy of special attention during the EIS evaluation. Riparian areas should be protected to ensure the maintenance of water quality and hydrologic processes; maintenance of the physical integrity of aquatic ecosystems; adequate amounts and distribution of woody debris sufficient to sustain physical and biological complexity; adequate summer and winter thermal regulation, appropriate amounts and distributions of source habitats for riparian-or wetland-dependent species; and maintenance of naturally functioning riparian vegetation communities.

**Response:** Potential impacts to riparian habitat and cottonwood galleries will be evaluated in the Intake EIS in chapter four. Reclamation and the Corps are committed to protecting riparian resources to the extent practicable.

**Comment:** The EIS should identify wetlands potentially affected by the proposed project including acreage, type, ecological role, and function. The project should follow Executive Order 11990; no net loss of wetlands. Wetland impacts should be identified in the EIS and an explanation of how impacts if any will be mitigated. Heavy equipment use in wetland areas should be avoided or restricted to winter time use on frozen ground.

**Response:** Potential impacts to wetlands will be evaluated in the Intake EIS, in accordance with Executive Order 11990. Impacts will be avoided, minimized, or compensated using best management practices.

**Comment:** The EIS should include a strategy for prevention, early detection of invasion, and control procedures for weeds during and after construction including monitoring progress on
effectiveness of weed control efforts. Revegetation (reseeding with native grass mix) should occur following construction activities as soon as possible to reduce potential for weed infestation and control erosion.

Response: The Intake EIS will include best management practices to maintain compliance with federal, state, and local noxious weed and pest laws as well as addressing control of noxious weeds and preventing their establishment and spread on public and adjacent private lands. Seedbank stockpiling and revegetation is a standard best management practice for all Reclamation and Corps construction projects, as well as weed management and erosion control. Impacts will be avoided or minimized, if possible. Appropriate mitigation measures will be included in chapter four.

National Environmental Policy Act

Comment: Concerns were raised at the public meetings that the federal government had already made a decision about a course of action. It was suggested that working together to find a solution would be a better. There were also concerns that if modifications were made to the irrigation project that did not work, the problems would not be fixed.

Response: No decision on any particular alternative has been made at this point and there will be continuous opportunities for public involvement. We are at the beginning of the NEPA process, not at the end when a decision will be made. The selection of an alternative to implement, which could be a decision to continue with the current course of action (No Action) or to build one of the alternatives previously described (see pages 4 - 9), will be made no sooner than 30 days after the final EIS is filed with the EPA.

To address the issue of a constructed project not working as planned, adaptive management will be an important component of this EIS. Adaptive management means that project managers must evaluate project operations and develop courses of actions that respond to change. Funding construction, operation and maintenance, as well as adaptive management will be addressed in the Intake EIS.

Comment: It was suggested that the EIS should have a clear and logical purpose and need statement and should follow NEPA regulations for analysis of alternatives. 40 CFR Section 1502.14(c) requires agencies to include reasonable alternatives not within their jurisdiction, so that all potentially reasonable alternatives are evaluated, even if they may require modification of Congressional approval or funding.

Response: Chapter one of the Intake EIS will clearly state the purpose of and need for the proposed project. The alternatives will be described in chapter two and evaluated in chapter four in compliance with NEPA. A full range of reasonable alternatives for improving fish passage and reducing entrainment will be evaluated in the EIS.

Comment: It was suggested that existing conditions be described, including but not limited to water resources, vegetation, wildlife, threatened and endangered species, land use, and tribal coordination. Establish analysis area boundary and extend to include potential impacts to resources. Use land ownership maps including resource features.
Response: Existing conditions will be described in chapter three, and the Intake EIS will focus on issues identified during public scoping. Land ownership is one of many GIS layers being used in the environmental analyses.

Comment: Impact analysis should reflect a level of analysis and data compilation so that the reader is able to establish whether the data support the conclusions and include appropriate mitigation measures. Impact analysis should follow 40 CFR 1502.16. Follow CEQ (Council on Environmental Quality) guidance - "Incorporating Biodiversity Considerations into Environmental Impact Analysis Under the National Environmental Policy Act."

Response: Reclamation and the Corps agree that there should be clear links between data, analyses, and conclusions. Preparation of the Intake EIS will comply with the Council of Environmental Quality’s NEPA implementation regulations. Appropriate mitigation measures will be included in chapter four. Reclamation and the Corps understand and will take into account general principles of biodiversity conservation in their decision making during the development of the Intake EIS.

Recreation

Comment: Primary concerns about recreation centered on impacts to the fishing access site and campground adjacent to the Intake Dam, fishing at the dam, and loss of income from harvesting paddlefish caviar. It was pointed out that the Yellowstone Caviar Project operated by the Glendive Chamber of Commerce has given over $650,000 in grants, is a local employer, and has supported 367 projects. Also, suggestions were made to protect the fishing ramp and to incorporate passage for boats over or around any structures.

Response: Chapter three will describe current conditions at Intake Fishing Access Site, including the contributions of the Yellowstone Caviar Project to Montana Fish, Wildlife, and Parks and local communities. Chapter four will evaluate the effects of the alternatives on these recreation resources. The impacts of the Yellowstone Caviar Project on the regional economy will be evaluated in the socioeconomic section in chapter four of the Intake EIS.

Socioeconomic Issues

Comment: The EIS should discuss the social and economic consequences of proposed dam modifications, including effects on the local economy, agriculture, recreation, etc.

Response: Chapter three will describe the current social and economic conditions in the area of potential effect, and chapter four will evaluate the impacts of the proposed project on these conditions.

Comment: Local landowners expressed concerns about impacts to private property and crops near Intake Diversion Dam. Impacts to the railroad and to the energy grid were also expressed. Impacts to existing power contracts with Reclamation was an issue.

Response: Impacts to private lands and appropriate mitigation will be evaluated in Intake EIS chapter four. The impact of each alternative directly on farm production and revenues including secondary spin-off impacts on agricultural support industries will be evaluated in the
socioeconomic section in chapter four of the EIS. Impacts to agricultural land values and the Yellowstone Valley Railroad will be evaluated in the socioeconomic section in EIS chapter four. The power demand of each alternative will be described in chapter two. Existing conditions of the local power grid and available power will be disclosed in chapter three. Chapter four will evaluate the effects of the alternatives on the power grid in comparison to No Action.

Existing power contracts with Reclamation may be affected, depending on power availability. Existing power contracts will be discussed in chapter three and the effects of the alternatives on those contracts, if any, will be evaluated in chapter four.

**Water Conservation**

**Comment:** Comments on water conservation ranged from a request not to restrict or reduce water flow to the irrigation project to a question on how water conservation will be incorporated into the Project. In addition an agency recommended that minimum in-stream flows be established below Intake Dam to sustain the ecosystem.

**Response:**

In relation to minimizing or reducing the construction, operation and maintenance cost of the alternatives, water conservation will be considered. Water use and irrigation efficiency will be addressed under existing conditions in Intake EIS chapter three. However, a detailed evaluation of conservation opportunities for the irrigation project is beyond the scope of the EIS. In addition the State of Montana already has a water reservation for instream flows on the lower Yellowstone River.

**Water Quality**

**Comment:** The 2006 Montana Clean Water Act Section 303(d) report identifies the fish passage barrier at Intake as a probable cause of use impairment for the warmwater fishery. The Yellowstone River segment below the Intake Dam downstream to the ND border is also listed, with water quality impairments to warmwater fishery and aquatic life uses. Impairment issues include chromium, copper and lead. The EIS should describe existing beneficial and summarize existing water quality in the project area. The Project should be planned and designed to protect water quality to maintain and/or attain compliance with water quality standards. Potential chemical, physical, and biological effects of proposed activities should be evaluated and disclosed.

**Response:** The purpose of the proposed federal action is to correct unsatisfactory fish passage and entrainment at Lower Yellowstone Diversion Dam (Intake) and canal headworks. If the proposed action is successful, the impairment to the warm water fishery caused by the dam (i.e., fish passage barrier) would be eliminated.

Existing water quality and beneficial uses will be described in chapter three. Potential temporary or long term changes in water quality associated with the construction and operation of fish passage and fish screen features will be evaluated in chapter four. Implementation of corrective measures for identified impairments not caused by the dam (e.g., chromium, copper, and lead) are outside the scope of the Intake EIS.
**Comment:** The EIS needs to evaluate lower Yellowstone River water quality conditions that may affect the endangered pallid sturgeon and other fish species.

**Response:** Effects of the alternatives on water quality, including identified impairments, will be disclosed in chapter four. The effects of water quality impairments not associated with alternatives to improve fish passage and reduce entrainment are outside the scope of the Intake EIS. The appropriate mechanism to address these water quality issues are the total maximum daily loads to be developed by the State of Montana to address the listing of the lower Yellowstone River as a category 5 impaired water on the State’s 303(d) impaired waters list.

**Future Public Involvement**

**Draft Environmental Impact Statement**

The release of the Draft Intake EIS will be announced along with the public review period and dates, times, and locations of public hearings. The public will have at least 45 days to review the draft EIS.

A least one public hearing with a court reporter and a hearing officer will be held during the public review period. Participants also will be encouraged to make comments through several mechanisms – written comment cards, letters, e-mails, or oral comments at the hearings. All comments received on the draft Intake EIS and hearing transcripts will be posted on the website at http://www.usbr.gov/gp/mtao/loweryellowstone

**Final Environmental Impact Statement**

Reclamation and the Corps will carefully consider comments and could respond to these by adjusting alternatives, adding new alternatives, supplementing or improving the analysis or making factual corrections. Each substantive comment will be carefully considered and will be responded to in the Final Intake EIS. The comments and responses will be published as an appendix to the Final Intake EIS.

**Record of Decision**

The Record of Decision cannot be issued until at least 30 days after the Environmental Protection Agency publishes its notice of availability for the Final Intake EIS in the *Federal Register*.

There is no requirement to formally publish the Record of Decision in the *Federal Register* or the media. However, the affected public will be made aware that the Record of Decision is available. News releases and public service announcements will be distributed to the media reporting availability of the Record of Decision.
Appendix A
Notice of Intent
incremental adaptive management approach should be compared to one another, and the better of those two options should be pursued.

9.2 Project Types. Commercial Navigation & Hydropower. For commercial navigation and hydropower features, the plan with the highest economic return (benefit cost ratio of at least 1.5) to the Nation for each increment of such work, consistent with protecting the environment, will be considered minimally acceptable. Plans that address the most critical needs and have an increasingly higher benefit cost ratio should be more heavily weighted in the selection process.

Flood and Storm Damage Reduction. Flood and storm damage reduction features could include structural and non-structural components. As both monetary and non-monetary values are likely to be part of the decision process when non-structural components are included, a comparative approach as identified in the Multi-Criterion Evaluation, Consistency & Transparency section will provide the clarity in these situations for decision making. When benefits are measured in monetary values only, the plan with highest economic return (benefit cost ratio of at least 1.5) to the Nation for each increment of such work, consistent with protecting the environment, will be considered minimally acceptable. Plans that address the most critical needs and have a progressively higher benefit cost ratio should be more heavily weighted in the selection process. Generally, when structural and non-structural components provide viable options when considering all evaluation criteria, including benefit to cost and adverse effects, preference should be given to non-structural components so long as the monetary benefits are at least at unity. The non-monetary benefits represent a majority of the total benefits and are of National significance, then consideration can be given to selecting a plan with monetary benefits less than unity.

Aquatic Ecosystem Restoration. For aquatic ecosystem restoration features, the plan that is cost-effective, sustainable, and is the alternative plan that best reflects an appropriate level to invest for that ecosystem from a national perspective, after considering the national or regional significance and cost of protecting or restoring that ecosystem compared to others will be considered as minimally acceptable for selection. Plans that address the most critical ecological needs using the minimum action needed to substantially improve the natural functions or services with increasingly higher cost effectiveness should be more heavily weighted in the selection process.

Multiple Objectives. For multiple objective projects with features and increments of work whose benefits and costs are jointly distributed among more than one objective, each such feature or increment of work should yield a net overall return to the Nation after considering its cost, effectiveness, and other benefits and adverse effects. Where the benefits are measured in monetary values only; those with highest net economic return (benefit cost ratio of at least 1.5) to the Nation for each increment of such work, consistent with protecting the environment, will be considered minimally acceptable. Plans that address the most critical needs and have an increasingly higher benefit cost ratio should be more heavily weighted in the selection process. Where plans have both monetary and non-monetary values, a comparative approach as identified in the Multi-Criterion Evaluation, Consistency & Transparency section is to be used in a decision. The monetary benefits of a multi-criteria plan must at least be unity. If the non-monetary benefits represent a majority of the total benefits and are of national significance, then consideration can be given to selecting a plan with monetary benefits less than unity.

9.3 Agency Considerations. The Secretary will consider exceptions to the selection criteria under the following circumstances: where there are overwhelming reasons for doing so, including safety and other Federal, State, local, Tribal, and international concerns. The reasons for an exception may be given in a request from the Chief of Engineers and must be appropriately documented. The full planning process carried forth through the study must be documented, completed and submitted along with the documented exception in order to uphold the ideal of a transparent process.

Brenda S. Bowen, Army Federal Register Liaison Officer.
FR Doc. E:\21244 Filed 0-11-00; 8:45 am
BILLING CODE 3570-42-P

DEPARTMENT OF THE INTERIOR
Bureau of Reclamation

DEPARTMENT OF DEFENSE
Department of the Army: Corps of Engineers
Notice of Intent To Prepare an Environmental Impact Statement (EIS) for the Intake Diversion Dam Modification, Lower Yellowstone Project, Montana

AGENCIES: Bureau of Reclamation, Interior, and Corps of Engineers, Army.
ACTION: Notice of intent to prepare an environmental impact statement (EIS) for the Intake Diversion Dam Modification, Lower Yellowstone Project, Montana.
SUMMARY: Pursuant to section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality's (CEQ) regulations for implementing the procedural provisions of NEPA, the Bureau of Reclamation (Reclamation) and the U.S. Army, Corps of Engineers (Corps) propose to jointly prepare an EIS that analyzes and discloses effects associated with modifications to Intake Diversion Dam. The proposed Federal action is to modify Intake Diversion Dam and canal headworks, features of Reclamation's Lower Yellowstone Project, to improve passage and reduce entrainment for endangered pallid sturgeon and other native fish in the lower Yellowstone River.

Reclamation and the Corps will serve as joint lead Federal agencies in the preparation of the Intake Diversion Dam Modification EIS. Reclamation will act as administrative lead for NEPA compliance activities during preparation of the EIS. Reclamation and the Corps will each consider and approve a Record of Decision regarding actions and decisions for which the respective agencies are responsible.

DATES: Public scoping meetings will be held in October 2000, from the SUPPLEMENTARY INFORMATION section for dates and locations of these meetings. Written or e-mailed comments on the scope of issues and alternatives to be considered in the Draft EIS will be accepted through November 14, 2000.

ADDRESSES: Written comments and requests to be added to the mailing list may be submitted to Bureau of Reclamation, Montana Area Office, Attention: Paula Holwegner, P.O. Box 30137, Billings, MT 59107.

FOR FURTHER INFORMATION CONTACT: Paula Holwegner, Bureau of
Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT 59107; telephone (406) 247-7200; or facsimile to (406) 247-7338. You may submit comments, requests, and/or other information by e-mail to pho@egov.gov.

SUPPLEMENTARY INFORMATION:

Dates of Public Scoping Meetings
- October 21, 2008, 5:30 p.m.-6:30 p.m., Sidney, MT
- October 22, 2008, 5:30 p.m.-6:30 p.m., Glendive, MT
- October 23, 2008, 5:30 p.m.-6:30 p.m., Billings, MT

Locations of Public Scoping Meetings
- Community Services Building—1261 West Holly, Sidney, MT
- Dawson Community College—200 College Drive—Ullman Center Room 102, Glendive, MT
- Montana State University—Downtown Campus—207 North Broadway, Billings, MT

The meeting facilities are physically accessible to people with disabilities. People needing special assistance to attend and/or participate in the public hearings should contact Patience Hurley at 701-221-1294 in the Dakota Area Office in Bismarck as soon as possible. To allow sufficient time to process special requests, please call no later than one week before the public hearing of interest.

Background Information

Reclamation’s Lower Yellowstone Project is located in eastern Montana and western North Dakota. Intake Diversion Dam is located approximately 70 miles upstream of the confluence of the Yellowstone and Missouri rivers near Glendive, Montana. The Lower Yellowstone Project was authorized by the Secretary of the Interior on May 10, 1904. Construction of the Lower Yellowstone Project began in 1905 and included intake Diversion Dam (also known as Yellowstone River Diversion Dam)—a 12-foot high wood and stone diversion dam that spans the Yellowstone River and diverts water into the Main Canal for irrigation. The Lower Yellowstone Project was authorized to provide a dependable water supply sufficient to irrigate approximately 52,000 acres of land on the benches above the west bank of the Yellowstone River. Water is also supplied to irrigate approximately 630 acres in the Intake Irrigation Project and 2,209 acres in the Savage Unit. Both of the smaller irrigation projects pump water from the Main Canal. The average annual volume of water diverted for these projects is 327,046 acre-feet.

The Service listed the pallid sturgeon as endangered under the ESA in 1990. The wild population of pallid sturgeon inhabiting the Yellowstone River and the Missouri River between Fort Peck Dam and Lake Sakakawea are anticipated to be extirpated by 2017 if reproduction and recruitment of young fish does not improve. The best available science suggests Intake Diversion Dam impedes upstream migration of pallid sturgeon and their access to spawning and larval drift habitats. In addition, previous entrainment studies on other native fish in the Yellowstone River suggest that once passage is provided, pallid sturgeon may be entrained in the Main Canal.

The lower Yellowstone River is considered to provide one of the best opportunities for recovery of pallid sturgeon. Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for listed species. Reclamation has been in informal consultation with the Service to identify potential conservation measures to minimize adverse effects to pallid sturgeon associated with continued operation of the Lower Yellowstone Project on the Yellowstone River. The Pallid Sturgeon Recovery Plan specifically identifies providing passage at Intake Diversion Dam to protect and restore pallid sturgeon populations. By providing passage at Intake Diversion Dam, approximately 160 river miles of spawning and larval drift habitat would become available in the Yellowstone River. By installing fish entrainment reduction measures, pallid sturgeon entrainment in the Main Canal would be minimized.

The Service recommended in their 2003 amendment to the Missouri River Master Manual biological opinion that the Corps assist Reclamation in providing passage for pallid sturgeon at Intake Diversion Dam as a conservation recommendation. Section 3106 of the 2007 Water Resources Development Act authorizes the Corps to use funding from the Missouri River Recovery and Mitigation Program to assist Reclamation with compliance, design, and construction of modifications to the Lower Yellowstone Project for purposes of ecosystem restoration.

Reclamation initiated a collaborative effort with the Service; Corps; Montana Fish, Wildlife and Parks; Lower Yellowstone Irrigation District; and The Nature Conservancy through a Memorandum of Understanding (MOU) signed on July 8, 2005. Reclamation coordinated a value planning study in August 2005 with representatives from parties signatory to the MOU to explore and evaluate a broad range of alternatives for fish passage and entrainment reduction.

Reclamation and the Corps will use a broad range of scoping activities to fully identify the range of potentially significant issues, actions, alternatives, and impacts to be considered in the EIS. These scoping activities will ensure the public has sufficient opportunity to review and comment on the proposed Federal action and reasonable alternatives for fish passage and entrainment reduction at Intake Diversion Dam. Public comments are invited and encouraged to assist agencies in identifying the scope of potentially significant environmental, social, and economic issues relevant to the proposed Federal action and determining reasonable alternatives to be considered in the EIS.

Reclamation and the Corps have scheduled three public scoping meetings and are inviting agencies, tribes, non-governmental organizations, and the public to participate in an open exchange of information and to provide comments on the proposed scope of the EIS.

Preliminary Alternatives

As required by 40 CFR 1502.22 to implement regulations, all reasonable alternatives to the proposed Federal action that meet the purpose and need will be considered in the EIS. These alternatives will include no action and a range of reasonable alternatives for improving fish passage and reducing entrainment. Appropriate mitigation measures will be incorporated into the proposed action and reasonable alternatives. The EIS will analyze and disclose environmental impacts associated with the proposed Federal action and alternatives together with engineering, operations and maintenance, social, and economic considerations. Through MOU partner discussions and evaluations, alternatives for passage have been identified, discussed, and analyzed. Preliminary alternatives to improve fish passage include the following:

1. Passage around the existing diversion dam;
2. Relocation of the diversion dam and canal headworks to take advantage of hydrology and topography;
3. Removing the dam and constructing a single or multiple pumping plants; and
4. Variations of a low-gradient rock ramp in the river.

The preliminary alternatives for reducing entrainment include:
(1) A fish screen structure in the Main Canal with fish bypass to river; and
(2) A rotary drum fish screen on the bank of the river.

The EIS will also include no action alternative that does not improve fish passage or reduce entainment. The public is invited and encouraged to identify other reasonable alternatives to improve fish passage and reduce entainment at the intake diversion dam and canal headworks.

Preliminary Identification of Environmental Issues

A range of issues relevant to the proposed Federal action have tentatively been identified for consideration and analysis in the EIS. This list is preliminary and is intended to facilitate public comment on the scope of this EIS. Reclamation and the Corps invite you to comment on the following general questions that reflect potentially significant issues or questions of widespread public interest believed to be relevant to the proposed Federal action. Reclamation and the Corps invite you to comment on the following general questions that reflect potentially significant issues or questions of widespread public interest believed to be relevant to the proposed Federal action.

How would the proposed action affect or address the following?

- Aquatic communities and habitats in the lower Yellowstone River?
- Delivery of irrigation water for the Lower Yellowstone Project?
- Continued operation and viability of irrigated agriculture in the Lower Yellowstone Project?
- Water-based recreation, such as changes to boat ramps and/or changes to angling opportunities for paddlefish and other fish?
- Economic conditions related to the paddlefish caviar industry?
- Social and economic conditions in affected communities associated with construction activities and long-term operation and maintenance, including paddlefish caviar harvest and concession activities?
- Short-term and long-term impacts on surface water quality?
- Floodplain, wetlands, and riparian communities?
- Water quantity associated with operations and climate change?
- Land-based recreation, including possible changes to the public park area and river access?
- Relevant cumulative environmental impacts to the Yellowstone River from past, present, and reasonably foreseeable future actions?
- Cultural resources such as historic, archaeological, architectural, or traditional properties?
- Environmental justice, particularly whether or not water management activities have a disproportionate adverse effect on minority and low-income populations?
- Compliance with all applicable Federal, State, and local statutes and regulations and with international agreements and required Federal and State environmental permits, consultations, and notifications?
- Compliance with all applicable executive orders?

Public Disclosure Statement

Reclamation and the Corps believe it is important to inform the public of the environmental review process. To assist Reclamation and the Corps in identifying and considering issues related to the proposed Federal action, comments made during formal scoping and later on the draft EIS should be as specific as possible. Reviewers must structure their participation in the environmental review of the proposal so that it is meaningful and alerts Reclamation and the Corps to the reviewer's position and contentions. It is very important that those interested in this proposed Federal action participate by the close of the scoping period so that substantive comments and objections are made available to Reclamation and the Corps at a time when they can meaningfully consider and respond to them.

If you wish to comment, you may mail or e-mail your comments as indicated under the ADDRESSES section. Before including your name, address, phone number, e-mail address, or any other personal identifying information in your comment, you should be aware that your entire comment including your personal identifying information may be made available to the public at any time.

While you can request in your comment for us to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Michael J. Ryan,
Regional Director, Great Plains Region, Bureau of Reclamation.
Witt Anderson,
Director, Program, Northwestern Division, Corps of Engineers.

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Intent To Prepare a Draft Environmental Impact Statement for the Proposed Folsom South of U.S. Highway 50 Specific Plan Project, in Sacramento County, CA, Corps Permit Application Number SPK-2007-02159

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DOD.

ACTION: Notice of Intent.

SUMMARY: The South Folsom Property Owners Group proposes to implement a large-scale, mixed-use, mixed-density master planned community with residential, commercial, office, public/quest-public use, open space, and parks. The proposed project consists of approximately 1,404 acres of residential development, 525 acres of mixed-use and commercial development, 109 acres of parks, and 1,053 acres of open space. The majority of the 1,053 acres of open space would be located in the western portion of the project site. This area includes Alder Creek, numerous cultural resources sites, and the highest concentration of oak woodland habitat within the project site.

The proposed Folsom South of 50 Specific Plan includes development of up to 10,045 mixed-density residential homes and approximately 7.4 million square feet of retail and office uses within an area south of Highway 50 that would be annexed to the City of Folsom. The proposed project would provide five elementary schools, one joint middle school/high school, and a campus for the Sacramento County Day School. It is anticipated that construction would begin in 2010. The initiation and duration of construction would depend on market conditions and receipt of environmental permits and clearances; full build-out would likely be completed within 20 years from construction commencement.

The project site is approximately 3,502 acres and contains 62.89 acres of waters of the United States. The proposed project would directly affect approximately 21.28 acres of waters of the United States, including vernal pools and other wetlands. These areas do not include indirect impacts from the proposed action or impacts anticipated to result from off-site infrastructure that may be determined to be required as part of the U.S. Army Corps of Engineers’ (USACE) Environmental Impact Statement (EIS) process.

The EIS will be prepared as a joint document with the City of Folsom. The
Appendix B
Easel Pad Notes (Sidney, Glendive, and Billings, Montana)
Sidney Mont. Public Meeting, October 21, 2008

- Leave the Lower Yellowstone Project alone. It has served us well and has been here for 100 years.
- Irrigators don’t want to fund construction of this project or maintain it.
- Ice will damage structures. You can’t control the ice jams in the spring. The dam was carefully placed where it is. The Yellowstone River is a monster when it floods in the spring.
- Are the fish more important than the irrigators who are trying to make a living? I only have found one fish in the canals over the years I have been farming.
- Families from all over the U.S. come to Intake to camp and fish. Paddlefish concentrate at the dam. This is a good impact to the local economy. There are 700 people at the Intake dam over Memorial Day weekend each year.
- Who benefits from the fish in the river?
- What will the project cost?
- Missouri River Master Manual – a lot of water is spilled for endangered species – isn’t that enough?
- What happens to the other dams on the Yellowstone River? Will this turn into a sturgeon river?
- If we fix the problem at Intake, do we get credit elsewhere?
- Will you open up enough river miles to address larval drift?
- Has a natural spawn been documented below Intake?
- Don’t species recover and get de-listed?
- What kid of success have you had with constructing fish passage and preventing entainment of other fish species?
- What will be done to stop other fish from eating the larval fish?
- Do pelicans eat the larval fish?
- There wasn’t a problem with pallid sturgeon until Garrison Dam was built on the Missouri River. Pike are eating the sturgeon. The responsibility for building the project and maintaining it shouldn’t fall on the irrigators.
- I am concerned about the electric pumping plant. The power in this area already faces a shortage, and wind blows only 30% of the time, so wind energy isn’t the answer. Coal is difficult to permit. This would be a wasteful use of energy in today’s environment.
- I am concerned that this project is a done deal. You have already made up your minds.
- What about the cost of maintenance?
The number one concern is the reliability of the system. When there is a peak demand for irrigation water, if you get behind, you can’t catch up.

The irrigators are the beneficiaries of the system but don’t want to be saddled with the cost of recovery for the entire Missouri River System.

Physical features break down over time. We need to build for 100 more years.

Has anyone ever eaten these fish? What good are they?

Is the trashrack strong enough to survive the large cottonwoods that come down the river during flood stage?

Glendive Mont. Public Meeting, October 22, 2008

Can the fish ramp be reconfigured?

Will boats be able to launch at Intake and move up and down stream?

What head is required at Intake for water to flow into the main canal? Could the canal function without a dam during moderate and high flows? If a month could pass without pumping, this would help pay for costs of a pumping plant.

The Tongue and Yellowstone Irrigation District have achieved fish passage. It can work.

Is there a review process after construction to measure success, or are we just stuck with the project whether or not it works? Will we have to wait a year or two for a fix if there is a problem?

What is the timeline for survival of the pallid sturgeon? Will other fish benefit from this proposed project?

Is the least invasive alternative the best and the quickest?

The Corps has committed to fund construction.

A biology report (Forbes and Richardson) says that little is known about the pallid sturgeon, and one can only hope that this project will work. How do we know that this project won’t economically adversely affect farmers and ranchers like in Klamath (another Bureau of Reclamation irrigation project)?

What happens to the existing power contracts with Reclamation?

Water rights – balance these with fish and irrigation. Consider in-stream flows during low flow.

Direct involvement by irrigation managers is essential for success.

Management issue – we need to work together to find a solution.

Fish hatcheries – have they been successful in pallid sturgeon recovery?

The impact of the Endangered Species Act and this project are of concern to the community in rural areas. We primarily are concerned about health care and assistance living facilities. The caviar industry has raised $1,000,000 for local projects in 18 years. How will this be affected? I want to see the entrainment study. Fish can be raised in
canals; they are in other parts of the world. Put a fish screen 6-7 miles away at Burns Creek Siphon. There would be significant cost savings to do this.

- How will the rock ramp be maintained?

Billings Mont. Public Meeting, October 23, 2008

- Will the improved passage open enough river miles to give the pallid sturgeon sufficient distance for larval drift?
- There are several lowhead dams on the Yellowstone River that are privately owned. Are these barriers to the pallid sturgeon?
- Regarding the Relocate Main Channel Alternative, does it cut through private property?
- Does all the water go through the removable drums before entering the canal?
- What is the source of all of the rock/aggregate? It should come from Montana.
Appendix C
Scoping Comments
Dear Mr. Lincoln:

At the request of Intake, Montana residents, we are submitting the Lower Yellowstone Diversion Dam, 24DW443, to the National Register of Historic Places for sites on Bureau of Reclamation Lands. We are local historians who have been active in local historic preservation in Northeastern Montana for many years.

Please find enclosed the National Register of Historic Places Registration Form. Our narrative is brief, however, the cultural resource report was completed in the “Lower Yellowstone Irrigation Project, 1996 and 1997 Cultural Resources Inventory, Dawson and Richland Counties, Montana, and McKenzie County, North Dakota” by Cynthia Kordecki, Mary McCormick, Carrie F. Jackson, and Jennifer Bales. The report was submitted to: U.S. Bureau of Reclamation, Montana Area Office in Billings, Montana in May 1999.

On page 5.104 of the Cultural Resources Inventory it is stated: “The Lower Yellowstone Irrigation Project is eligible for listing in the National Register of Historic Places under Criteria A and C at the local and regional levels. The district’s period of significance is from 1905 to 1950, and includes the initial construction phase and the period of early operation and use. The end of the period of significance is marked by completion of the Savage Irrigation Unit, the last major addition to the operating facilities.”

On page 5.105 of the Cultural Resources Inventory it is stated: “The Lower Yellowstone Diversion Dam retains integrity. Although approximately two-thirds of the dam was reconstructed in the early 1970s, the work followed replacement-in-kind standards with deteriorated timbers simply replaced with new timbers. The dam fully retains its historic timber-crib design, size, form, and massing. The other major historic features are extant and virtually unaltered, including the two cableway towers and the dike on Joe Island (Table 5.6). Even though the boiler plant and engineer’s house are not original, both building represent historic-era replacements.”

We assume you are familiar with this study. If not, Bill Vincent, archaeologist at the Montana Area Office has copies. Also enclosed is a CD with various views of the diversion dam.

Please consider the Lower Yellowstone Diversion Dam for the National Register of Historic Places. Please advise us if we need to accomplish other tasks on this application. Thank you.

Sincerely,

J. Rebecca Kallevig and Betty Cumming

Cc: William Vincent, Archaeologist BOR, Billings, MT
    Mark Baumler, Director, State Historic Preservation Office, Helena, MT
October 19, 2008

Department of the Interior, Bureau of Reclamation
Department of Army, Corps of Engineers
U.S. Fish and Wildlife Service
Montana Department of Fish, Wildlife and Parks

To whom it may concern,

I have utilized the Lower Yellowstone Irrigation Project to irrigate my property (720 acres irrigated) for the past seven years. During that time I have attended many meetings in reference to the continued use and operation of the Intake Diversion and Canal facility, and the requirement to address pallid sturgeon issues as per the Endangered Species Act. Over the years, two main objectives or goals seem to take priority: 1) save pallid sturgeon from extinction and 2) maintain irrigation in the Yellowstone Valley between Intake and the confluence of the Yellowstone and Missouri Rivers, thereby preserving the agricultural industry and character of the area and surrounding communities. Somewhere along the line I feel “maintaining irrigation” became “keeping the canal open” and some potential resolutions were never considered, much less evaluated. I have been told by several people at the Bureau of Reclamation that this is the appropriate time to submit my concept for consideration by ALL of the concerned agencies. I am not an engineer nor a biologist and I understand that this is a complicated task; however, I hope that you will give this option some consideration.

Simply put, instead of using the funds to rebuild a structure across the river in a fashion that we hope allows the Pallid Sturgeon to swim upstream and another to keep their young from being sucked into the canal, remove it all as that truly is the only guarantee of success. I propose that the funds that would have been spent on the new diversion and screen system ($50-$60 million not including monitoring for years?) should be spent to construct individual irrigation pivots and pumping systems for landowners and acreages that are presently served by the canal.

- There are approximately 52,000 acres served by the canal now. Approximately 5,000 acres are already served by pivots (re Jerry Nypen/Lower Yellowstone Irrigation Project Manager) leaving up to 47,000 acres that would require pivots.

- At $1200 an acre average cost (re Agri Industries, Sidney, Montana) that is $56,400,000 for the full 47,000 acres. The economies of scale and competitive bidding will certainly drive this estimated cost down considerably.

- Acreage requiring pivots could be further reduced by offering a “Non Irrigate” clause to landowners. For example, landowners could be offered +/- $75 an acre for 20-25 years to waive construction of pivots (this is equal to 6.25% on $1200 an acre), which would still allowing them to dry land farm those areas. There is just no way for me to estimate how many owners would opt for this “Non Irrigate” option.
• The water quality would improve as a certain amount of owners would opt for the “Non-Irrigate Payment” thereby increasing shelter and buffers along the river and reducing run off of agricultural products.

• Many landowners could draw their water from a well instead of the river, which would reduce the amount of water removed from the river. The federal government is in a much better position to help determine where adequate sources of subsurface water exist thereby developing another valuable resource.

• If the Agencies decide, anyone who has a pivot now could be reimbursed on a pro rata basis dependant on how old the system is.

• Anyone who would sell their property (after receiving a pivot) over the next 20-25 years, could have a recapture clause so that a portion of the proceeds could be paid back to the funding agency.

• The pivot systems would require three phase electric. Running three phase electric through the valley would dramatically increase business and industrial opportunities for those who couldn’t justify it previously for economic purposes.

• The boat ramp located at Intake could then be used to launch a boat and travel south as well as north, immediately doubling it’s potential recreational opportunities.

• As for the Paddlefish/Caviar Program, it is my understanding that North Dakota has one as well and is quite successful without an obstruction in the river. Speaking from personal experience, I have many anglers each year fish from my shore line two and three miles from the diversion and catch many paddlefish.

Pursuing the alternative I have outlined above would accomplish many things. First, as stated earlier, it is the only guarantee that the Pallid Sturgeon will pass upstream of Intake Diversion or not be sucked into the ditch. Second, it will maintain irrigated agriculture while dramatically reducing the amount of water removed from the river. At present the canal directs roughly 327,046 acre feet of water from the river annually (Draft Biological Assessment/Bureau of Reclamation January 2005). They estimate that “Generally 60% of the diverted water is lost to operational spills and transportation losses, that is either returned to the river via wasteways or contributes to seepage or evaporation. About 40% of the diverted water is delivered to the lands of which about one-half returns to the system via drains. Approximately 20% of the diverted water is actually consumptively used.” If only 20% is being consumptively used that is 65,409 acre feet annually. Agri Industries estimates that converting flood irrigated ground to pivots saves somewhere between 30%-50% dependant on crops grown and soil varieties. If you reduce the 65,409 acre feet by an additional 40% (median savings) that leaves you with 39,245 acre feet annually that would be removed from the river. A mere 12% of what is removed now. That doesn’t even take into consideration the landowners that
could draw their water from a well instead of the river, or those landowners who decide to opt for a “non-irrigate” alternative.

In closing it seems that we (all state, federal agencies and the public) will have one opportunity to take on this project. The likelihood of the federal government budgeting these kinds of funds for a project in Eastern Montana again are realistically very slim. It has been 100 years since the last such investment, And if it doesn’t work, pallid sturgeon won’t get a second chance. Based on Bureau of Reclamation estimates they will be extinct by 2017. I feel the alternative I have described is most likely to successfully achieve the project goals of saving pallid sturgeon from extinction and maintaining irrigation in the Yellowstone Valley between Intake and the confluence of the Yellowstone and Missouri Rivers.

Thank you for your consideration,

Matthew M. Rosendale, Sr.
1954 Hwy. 16
Glendive, Montana 59330
Telephone:406-687-3549
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name: John Ely

Organization and Address: Gateway M.P. 58338

2641 - Cherry Creek Rd.

Phone: ( ) FAX: 701-744-3435 E-mail

Comments:

1. Would you put a female pallid sturgeon egg into a intake dam, does she go to the lake water to spawn? If you don't know, why hasn't this been tested?

   Maybe there is no need to take out intake dam.

2. Since Fort Peck Dam and Garrison Dam have been put in, could the Northern Pike and other carnivorous fish have gotten greater than they were then?

   With the Walleye being introduced, could this have put pressure on the Pallid Sturgeon? (maybe we need to fish the mainline dam)

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBRSM@ADLWR/YELL@gs.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
Yellowstone Caviar Project
808 N. Merrill
Glendive, MT 59330

www.glendivechamber.com

For Montana fishing and hunting details, consult the Montana Fish, Wildlife and Parks, Department, Helena, Montana.
Paddlefish are an excellent example of 
species that can last well over an 
hour from 60-160 pounds. Once snared they 
give weight to the sport. All Paddlefish can 
withstand the effort, but the rewards are out 
 bey. Each week is a challenge for the resident 
Paddlefish. It makes a special pleasure with 
those trophies which are home to the spawning 
period. These remind us, like the Yellowsurge 
this small special of angling skills and 
patience needed, and 
Yellowsurge annually 
join nearly 3000 
From May 15 thru 
the World 
and \nthe Yellowsurge 

Inland Community, 

of Eastern Montana, 17 miles north of this 
near Glendive. Montana's 3rd largest on the plains 
cafe admirers, has become a unique experience of 

Fishing the sport that has thrilled generations of
Dear Paula Holwegner,

I support any Bureau of Reclamation project that, barring any significant negative impacts (obviously), minimizes fish entrapment and creates corridors for wildlife, particularly endangered species.

I write to you, prompted by the intake diversion dam modification of the Lower Yellowstone Project. I must admit that I was unable to make the public meetings and I have not reviewed the environmental impact statement. Ergo, my comment is based on ignorance of the details specific to this case, but as a general comment, it is worth mentioning.

Have an agreeable week.

Respectfully, Lisa Carnicom

lisa@sweeplotus.com
I would like to request the comment period be extended for the Intake Diversion Modification Project from November 14 for at least another month. There is too little time for local people to fully understand the all the ramifications and concerns for this area in such a short comment period and respond accordingly to so much information. It has been less than a month since the only public meeting here in Glendive was held. It took the agencies many years to come up with these draft alternatives and then the public gets less than a month to comment? This doesn't seem like the appropriate and fair way to seek public comment on such a an important and complex issue. Thank You. Mike Carlson
From: Signe Snortland
To: Micki Weimerskirch
Date: 11/7/2008 12:14:01 PM
Subject: Fwd: Intake Diversion Dam @ Intake - Canoe Portage Path

>>> Susan Newell <snewell@imt.net> 11/7/2008 11:19 AM >>>
This a follow up to a phone conversation with Jeff Baumberger on Nov 7, 2008.

Please incorporate a portage path around the Intake Dam for canoe portaging in your alternatives for the Intake Diversion Dam @ Intake.

Having canoed that stretch of river, I can say getting around the dam in its present state is a major hassle and hazard for canoers and kayakers.

Please put me on your mailing list for this project and other future projects.

Thank you.

Susan Newell
2928 West MacDonald Drive
Billings, MT 59102
My brother and I own the ranch upstream from Intake on the canal side of the river. Two of the proposals would involve either digging a canal through our property or building a dike across our hay meadow. We inherited this ranch two years ago and worked on it since we can remember. This ranch has been in the family for nearly 100 years now. Both options mentioned above would mean we could lose a part of our land that is vital to our livelihood and something that means a lot to us. We currently have two pump sites where the proposed canal would begin. What I am supposed to do about the fields that I couldn't irrigate during the time of proposed construction? The option of building the dike across my meadow and building a new headworks would mean that I would lose a fourth of my hay production that I rely on as income and wintering cattle. Also, I would lose an area I use for summer and winter pasture. More important than money is the possibility of losing land that I love and have worked for 40 years. In the early 1900's when Intake was built the island across from the canal was owned by my great grandfather, Charles Temple. He lost that land to the federal government. I certainly don't want to see my family lose any more land and possibly our way of life. So I ask that you please consider the options, the fish ramp and the pumping station, that would leave my property intact. The fish ramp seems to be the least invasive measure to solve the problem, has shown success in other areas, and doesn't affect landowners adjacent to the dam.
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)
Name  Penny Rice
Organization and Address  Irrigation Farmer Rancher
122 Road 555
Helena Montana 59630

Phone (406) 587-3262 FAX E-mail

Comments:
I attended the public meeting on June 24, 2008 in regards to the environmental impact statement being prepared for the Intake Diversion Dam modification. The Yellowstone Project at Intake Montana where we have our irrigated farm. Discussion was mostly in favor of removing of the dam to save the "lonely" Black Sturgeon and other native fish. Much discussion in the impact that this would cost ranchers and farmers in the future if the dam was removed. Representatives, from Upper Missouri Heart and Jon Barrett also spoke. Costs to keepently on hydropower have risen significantly over the last few years due to the drought, growing power supply needs, due to hydroelectric and oil and gas development. The dam has been in operation for 90 years. The dam has provided dependable water supply.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWR@gs.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
As part of the public scoping process, comments should be sent to Paula Hofwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name            
Organization and Address    Irrigation Farmers Rancher  
                                122 Road 555  
                                Glendive, Montana 59330

Phone 406-622-3092  FAX  E-mail

Comments
Suffered to irrigate approximately 52,000
acres of land on the mesa along the west bank of
the Yellowstone River. Water is also supplied to irrigate
approximately 830 acres in the Intake Irrigation Project
and 2,000 acres in the Savage Unit. Both of the smaller
Irrigation Projects pump water from the Main Canal.

The average annual volume of water diverted for these
Projects is 227,046 acre-feet. We discourage your
Proposals to modify the Intake Diversion Dam and Canal
Headworks to the Cost of $50 million. The modification of
this dam is not as great impact to the agricultural
Community.

Please leave the dam alone.

Farmers and our irrigation is more important than having a fish. Please
save our fish instead!

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your
comments to IBR6MTADLWRYELL@usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will
become part of a public record. You may request that your name and/or address be withheld
from public release. Those requests will be honored to the extent permissible by law.
Good Morning!

As requested you will find information below regarding the Intake Fishing Access Site and the Yellowstone Caviar Project.

The paddlefish is a unique species of fish found only in two river systems in the world - the Mississippi River and its tributaries in the United States and the Yangtze River in China. Although recorded as early as the Lewis and Clark expedition, the paddlefish remained relatively unknown in Montana until an angler accidentally snagged one in 1962. Since that time the popularity and interest in this unique and valuable resource has grown tremendously. In fact, in 1973 a 142-pound paddlefish was pulled from the Missouri River, setting a state game fish record that still stands. Now every spring thousands of anglers come to the Yellowstone and Missouri rivers to try their luck fishing for Montana’s largest game fish as they migrate upstream to spawn. For years the paddlefish harvest at Glendive was primarily for sport and the meat. The roe from the females and their remains were discarded in open, fly-covered containers or left on the banks of the river. In 1987, the Glendive Chamber of Commerce & Agriculture began investigating the possibility of paddlefish roe being a saleable commodity.

The 1989 Legislature responded to a request to allow paddlefish eggs to be processed and sold as caviar. House Bill 289 requires the Department to adopt rules to select a non-profit corporation to collect paddlefish eggs donated by anglers at the Intake Dam site on the Yellowstone River northeast of Glendive. The Yellowstone Caviar Project, which is operated by the Glendive Chamber of Commerce & Agriculture, was the non-profit organization chosen to operate the paddlefish season at the Intake Site. Since the program’s inception in 1990, the Yellowstone Caviar Project has given over $650,000 to MT Fish, Wildlife & Parks for paddlefish research. The program has also given out an additional $648,175.50 in grants for historical, recreational, cultural and fish and wildlife projects in Eastern Montana. These dollars mean that 367 different projects were funded either fully or partially. Some of the projects funded were starter blocks for the Glendive Kiwanis Swim Team; Exhibit Completion for Children's Museum for the Two Rivers Economic Growth, Inc; Mountain Lion Interpretive and Educational display for Friends of Makoshika; Recreational Adventures in Education for the Circle Public Schools After School Program; Outdoor Light Fixtures for the Colstrip Schoolhouse History & Art Center - just to name a few. Funds have also been used for road improvements from Highway 16 to the Intake site. When the rules were set back in 1989, it was stated that since the impacts and benefits of this program are unknown, the Legislature opted to make it a pilot program and established a June 30, 1993, termination date. We believe the numbers more than prove the program’s success.

Snagging is possible in various locations but none of those locations have the potential for cleaning the fish for the anglers and gathering the eggs. As stated in our 2008 Memorandum of Understanding with the MT Department of Fish Wildlife & Parks, we are not allowed to take roe donations other than at the Intake Site.

Intake fishing access site is also the site of a major campground used during the paddlefish season. Annually May through July Eastern Montana is the home for some 3500 fishermen from all different states and from other countries as well. The fishing season is based on a season limit so it varies from year to year as how much money turns hands in Eastern Montana. The campground and its concessions spend thousands of dollars annually to keep campers happy and fed. If our main snagging area for the paddlefish changes, the campground will not be used as much and services provided will not exist. Fishermen will not come to this area.

Because fish are now cleaned at one spot, researchers are able to obtain new biological data. New techniques of aging paddlefish and obtaining population data have also been developed. One of the major benefits has been the incentive given to the MT Dept of FWP to better manage the paddlefish population. Cooperation between North Dakota and Montana has resulted in a
joint study done between the two states in 1994 and resulted in a first ever "North Dakota/Montana Paddlefish Management Plan."

In 1993, the Yellowstone Caviar Project gave assistance to the Williston, North Dakota Chamber of Commerce in developing a similar caviar operation. Profits there are used for projects similar to those of the Montana program. Harvard University and the Ford Foundation have recognized this non-profit endeavor as one of the most innovative new programs in the United States. Approximately 8 seasonal jobs and 2 permanent jobs have been created by this project. The caviar committee consists of 5 members, all of whom have donated thousands of volunteer hours to this project.

The marketing of paddlefish caviar continues to be an annual endeavor. Processing, grading, packaging and shipping are all done locally by the Yellowstone Caviar Project. The price and demand for the paddlefish caviar continues to increase due to the exceptional quality.

The Glendive Paddlefish Caviar Project has become a model of ingenuity and success. Where in the past, eggs were thrown away and wasted, this natural resource now provides community funding and jobs. At the same time, it is insuring the conservation of the paddlefish for generations to come.

According to an article by New York Times food critic, Craig Claiborne, printed in the June 5, 1984, Spokesman-Review, it takes an expert to know exactly how to extract the eggs without breaking them, the amount and kind of salt to use, how long to age the caviar, and the proper temperatures for keeping it. His article also said that the eggs must be taken within minutes after the fish is caught, and that it must be done in very clean surroundings.

A complete removal of the original Intake Diversion Dam would eliminate the fishing potential and the caviar program. We feel that any of the four proposals as they are would be detrimental to the caviar program thus having the potential of eliminating the program and all the benefits it has for Eastern Montana. We understand the importance of maintaining the pallid sturgeon in our rivers and streams. The process of saving the pallid sturgeon should not exclude the importance of the paddlefish/caviar project and the good that comes out of the program, i.e. the economic impact on the Glendive area during the paddlefishing season, dollars to FWP projects and the grants received by Eastern Montana projects.

Our committee has discussed at length and has been in contact with Bureau of Reclamation and FWP representatives, we support the least intrusive way of stabilizing the pallid sturgeon. We would like to recommend an additional scenario that one of our committee member has researched. Darrel Hystad has put in several hours researching and designing this proposal. He has been a life long angler who knows the Intake area well and understand the river flows. It is the caviar committee's opinion this proposal would be the least intrusive to all involved which includes but not limited to the health of the pallid sturgeon, irrigated farmers, anglers, the Intake Site and the Yellowstone Caviar Project.

I attempted to attached Mr. Hystad's proposal to this email but it would not scan clearly. I will send hardcopies of this entire email with the attachments to all of you today.

Thank you for your consideration in this very important and delicate matter.

Kim Trangmoe
Glendive Chamber of Commerce & Agriculture
Executive Director
808 N. Merrill
Glendive, MT  59330
406-377-5601
chamber@midrivers.com
Yellowstone Caviar Committee
Norman Unterseher, Chairman
Greg Post
Dennis Germann
Darrell Hystad
Kim Trangmoe
I currently own property above the Intake Diversion Dam that has been part of my family since the early 1900's. Joe's Island was basically stolen from my family in the early 1900's by the government as eminent domain. One of the Federal Government's plans that will cost millions to conform my family's property for basically one species of fish, thus destroying its agricultural potential forever, is absolutely ludicrous. Professional biologists explained that the plan to change the channel and flood plain on our property is only a hypothesis for Pallid Sturgeon success. There is no valid data proving that this option will even work. It appears to me that engineers that work with much larger projects (like the lower Missouri and Mississippi) dreamed up this option. Along the lower Missouri and Mississippi there is arable farmland for miles outside of the floodplain. Where is the arable land outside of the floodplain in our area? There really is none. The Yellowstone Floodplain is absolutely precious farmland that should not be destroyed to save one species of fish. What is most pathetic is the fact that our government will waste this much time and money on this and not even consider helping a community like Glendive with its floodplain issues...issues that effect humans. Glendive is dying as a result of mainly what the federal government has done...building basically a dam across the floodplain when they constructed I-94.
November 14, 2008

Bureau of Reclamation
Montana Area Office
P. O. Box 30137
Billings, Montana

Attention: Paula Holwegner

Subject: Comments on Notice of Intent to prepare an EIS, Intake Dam, Lower Yellowstone Irrigation Project, Montana

The Districts of the Lower Yellowstone Irrigation Project encourage the Rock Ramp alternative as the best alternative for fish passage. It seems to be less invasive on the river system, maintains the diversion location where it has historically performed well, and demands the least amount of operation, maintenance, and replacement activity in the future.

The Districts encourage the v-screen and trash rake alternative to the rotating drum alternative. There is doubt that the rotating drums will perform adequately in the Yellowstone River environment due to its uncontrollable debris and silt laden waters.

It is imperative that the agencies involved in the endangered species process keep in mind the importance of the dam and diversion works. They provide for a large natural resource development that influences the well-being of thousands of people. It is hopeful that a key factor in fish recovery be the risk factor in maintaining the operation of the irrigation project into the future.

Our concern is that devices are reliable, devices that will handle the major forces that prevail on the Yellowstone River. Devices should be of simplicity, and employ the latest state-of-the-art automated features that will limit the risk of failure. Devices must be constructed with sufficient contingency to provide continuous non-interrupted flow of water to the Main Canal.

The following comments are made on alternatives that have been presented.

FISH PASSAGE ALTERNATIVES:

Rock Ramp Alternative:

This alternative appears to be the most desirable from an O,M,&R standpoint. It should not require as much channel stabilization work as the others, although there may be some pressure put on the left bank at the structure and below. This could cause some concern to the improved land downstream on either side of the river.
The elevation of the rock ramp is a concern. Currently a crest elevation of 1.0 foot above the old wooden dam crest is required to divert a full canal with all 11 gates fully open. The fish screen will require a certain headloss to operate satisfactorily. Some contingency should be built into the system to accommodate minimal changes in the canal properties in the future.

Our biggest concern is that the structure be substantial enough to prevent premature deterioration. The severe loading on the channel due to the uncontrollable flood and ice events should be a significant factor in the design. The difficulty in the accessibility to repair or replace failed structure features should be considered. A thick prism of good quality concrete and rock is necessary to achieve the longevity that is needed.

This alternative would eliminate the annual maintenance routine on the existing dam. The irrigation project has had the duty of adding rock material almost annually. The amount of rock has slowly decreased over the years; however, a fair amount of rock has been required after large ice events.

**Relocate Diversion Upstream Alternative:**

We expect this alternative to include considerable riverbank stabilization to maintain a permanent point of diversion. Jetties and bendway-type structures could keep the channel stable; however, they will deteriorate over time as others have on the lower Yellowstone, and future maintenance is a concern. There is insufficient rock in the area to perform affordable repairs.

There is concern for extracting water from the river at the proposed diversion site. In low-water times late in the irrigation season, especially during drought years, it becomes necessary to divert a full canal. This requires extracting up to 50% of the river flow. Some diversion mechanism will be required and we expect this would by a portable dam. Getting the devices in and out in a dynamic river that fluctuates wildly during upstream precipitation events can be an extraordinary chore.

We are concerned with the canal channel and siphons adjacent to the railroad. Railroad companies can be very difficult to work with should there be any future problems, for example canal seepage or bank stabilization problems resulting from canal operations.

This alternative adds a considerable amount of physical features: 2.5 miles of main canal, large siphons, and the river stabilization structures; presenting additional responsibility over other alternatives.

**Relocate Main Channel Upstream Alternative**

This alternative involves the installation of a considerable amount of physical features to divert the river away from its normal course. It will involve a great deal of bank protection upstream of the side channel entrance and throughout the length of the side channel. Grade control will be a concern. Natural river forces by high flows and ice loading will constantly wear on the new channel features. Maintenance and reconstruction requirements will evolve that will accelerate over time. Lack of stabilizing material in the area will exacerbate this maintenance chore.
It will be necessary to extend the main canal into the river bottom to the entrance of the side channel. Ice jams can inundate the canal extension area exposing it to physical damage. There would be insufficient time between ice events and mid-April canal startup to clear and re-shape the canal. Levees up to 20 feet high around the canal extension would be needed to limit this problem.

The same concern for channeling low flows toward the diversion works as explained in the previous alternative is valid for this alternative also.

**Single Pumping Plant Alternative**

Cost of operation, maintenance, and replacements, and reliability of pumped water causes the utmost concern to the irrigation project. Expected annual cost of this alternative is as follows:

- The annual electric bill could be $720,000, over $12 per irrigable acre.
- Pumps in the lower Yellowstone region wear more than normal due to the silt laden water: rebuilds of bearings and impellers on LYIP’s existing pumps are performed about every 7,500 hours. Pumps on a multiple pump routine are expected to run 2,500 hours per year. Rebuild cost is expected to $8,000 each. Annual cost could be about $29, 300 for a staggered service routine for 11 pumps.
- Other routine operation and maintenance could be about $19,000.
- Present worth of pump and motor replacements would be $155,000 ($200,000 per pump every 30 years).
- Add another $20,000 per year for buildings, infrastructure, generator, and pump handling equipment replacements.
- River channel work to maintain a diversion especially under low flow conditions would be necessary. It can be expected that the costs associated therewith would be offset with current cost of annual O,M&R costs of the present dam.
- Total estimated annual O,M&R cost of the pumping plant alternative could be $943,500, a 56% increase over existing cost.
- Of utmost concern is the unpredictable power availability and rate in the future. Energy is probably the most volatile commodity we have. No one can give assurance that energy cost won’t exceed the benefits of the irrigation project and it’s a situation we encourage to stay clear of.
- This alternative would be very undesirable from a social-economic perspective. It in effect trades one environmental concern with another. The irrigation project utilizes a natural resource for great public benefit with little consumption of energy. Converting the diversion works from no-energy consumption to high-energy consumption drastically reduces public benefit.

**FISH SCREEN ALTERNATIVES:**

**River Rotating Drum Screens Alternative:**

It is difficult to analyze this alternative screen concept since it is relatively new and not utilized long enough to know what the O&M needs are.
Of concern are the submerged screen parts such as the track, sealing feature, and lifting device parts. It seems that it would be necessary to isolate and dewater the units to repair or replace parts when necessary. Freeing units that become blocked or otherwise bound in place would present a challenge especially during the irrigation season.

Durability is a concern. Large debris including large trees with root balls is sometimes pulled into the diversion stream. Their momentum could cause impact damage or at least stop the rotation of screens.

Because of the many moving parts and expected higher frequency of replacing worn or damaged parts, it seems imperative that an on-site O&M shop be part of the works.

Full accessibility to the screen area is needed with heavy equipment. This would require a 10’ minimum wide concrete driveway the full length of the diversion structure.

**Canal V-screen and River Cleaning Rake Alternative:**

The V-screen has been proven to provide adequate fish protection in other areas. It must be engineered in a way that will accommodate the local special conditions. We are concerned about the silting problem that is likely to occur in and around the screen during high river flows. A downstream screen location in the Main Canal could solve the problem.

The rake should be able to extract most of some heavy accumulations of floating moss or pondweed in the diversion stream. This condition can occur late in the season when water becomes clear and much of the river flow is made up of nutrient laden return-flow from upstream irrigation.

The cleaning rake should also accommodate large debris known to congregate in the diversion stream. It should handle small trees with rootballs. It may be appropriate to remove large trees with a picking device on a crane. Even with a gantry crane feature, it is necessary to include a 10’ minimum roadway width the full length of the diversion dam.

This ends the comments. Your inclusion of the irrigation districts in the endangered species process is appreciated.

Please don’t hesitate to contact us if need be.

Sincerely,

Jerry Nypen, Manager
Lower Yellowstone Irrigation Project Board of Control
From: Signe Snortland
To: Alison Schlag; Micki Weimerskirch
Date: 11/14/2008 3:23:23 PM
Subject: Comment on Intake EIS

<IBR6MTADADLWRYELL@gp.usbr.gov>:
Sorry, I couldn't find any host named gp.usbr.gov. (#5.1.2) so what is the right email?

Hello,
Reading about this worship of the creature [endangered species] and not the Creator, I tried to savvy how the small fry would drift upstream if the dam was manipulated. Then it became clear that the adults need to be transported farther upriver into fast water [that they don't like] so the small fry can drift Downstream for who knows how far, perhaps back around Intake. I suggest that a way to trap the adults be figured out so they can be hauled upstream, and even stocked in the Tongue and Powder rivers, so at least they will be where the 'planners' supposedly want them to be, and as to which, there is no surer way of making sure they get there than this method. This will save the $millions that are proposed to be spent on an iffy idea. I know that salmon are barged around obstacles, so why not these? Then the chance of the fingerlings doing whatever they will do can transpire. The main thing is to get some adults up where there is no guarantee they will go on their own.
Larry, since 1934
Bureau of Reclamation  
Montana Area Office  
Attn: Paula Holwegner  
P.O. Box 30137  
Billings, MT 59107

Dear Ms. Holwegner,

The Mid-West Electric Consumers Association appreciates the opportunity to comment on the U.S. Bureau of Reclamation’s (“Bureau”) and U.S. Army Corps of Engineers (“Corps”) intent to prepare an Environmental Impact Statement (EIS) on modification of the Intake Diversion Dam (“Intake”) on the Lower Yellowstone Project, as published in the Federal Register, September 12, 2008.

The Mid-West Electric Consumers Association was founded in 1958 as the regional coalition of over 300 consumer-owned utilities (rural electric cooperatives, public power districts, and municipal electric utilities) that purchase hydropower generated at federal multi-purpose projects in the Missouri River basin under the Pick-Sloan Missouri Basin Program.

Mid-West understands the Bureau’s and Corps’ need to address endangered species issues – the pallid sturgeon – attendant with the Intake Diversion Dam. As a member of the Missouri River Recovery Implementation Committee (MRRIC), Mid-West is committed to working with federal agencies to address ESA issues, and offers the following comments:

The Bureau’s Final Report on the Lower Yellowstone Fish Passage Alternatives Value Planning Study (August 10, 2005) reported on nine alternatives to address ESA issues at Intake. Of those nine, the Final Report had four first tier alternatives (proposals 5, 7, 9, and 3) to be studied further; and three second tier alternatives (proposals 6, 4, and 8) that might also merit further study.

The Federal Register notice only identifies six alternatives that might be further developed. The Federal Register notice does not use the same descriptions of alternatives that are used in the final report. It would be helpful to clearly identify in the Federal Register notice which of the recommendations of the Final Report will be the subject of the EIS.

The Final Report appears to be inconsistent in identifying Critical Items to be considered. Some of the proposals note a concern with the timing of construction, seeking to avoid disruption of fish spawn, or availability of water to the Lower Yellowstone Irrigation project (proposals 2, 6, 7, and 8). Other proposals that would appear to involve substantial construction perhaps over more than one year do not note construction as a Critical Item (proposals 1, 3, and 5). Mid-West
can understand the concern with construction activities, but does not think that concern has been considered in evaluation of every proposal.

Of greatest concern is that the Federal Register notice and underlying studies conducted about Intake do not take into account economic impacts or legislative action that might be necessary to move forward.

Currently, water provided to the Yellowstone Irrigation District from the Intake is delivered to the canals by gravity flow. Alternatives (proposals 4 and 9) would require pumps to lift the water out of the river and into the irrigation district’s canals. That is a significant change in the operations of the irrigation district and would add substantial costs to the irrigation district and federal power customers of the Pick-Sloan Missouri Basin Program, since project use power is delivered at a substantial discount to federal irrigation projects with unrecovered costs being included in the power rates of federal power customers in the region.

There is also a question of the impact on power supply should the pumping alternatives be chosen. If the Western Area Power Administration (“Western”), which is responsible for the marketing and delivery of federal power – does not have sufficient power available, it will either have to purchase power on the market – at substantially higher costs than the federal power generation of the Bureau and the Corps – or withdraw power from its firm power customers. In either case, that means increased costs.

None of these concerns have been sufficiently identified or evaluated. Mid-West urges the Bureau/Corps team undertaking this EIS to consult with Western to determine the economic impacts of proposals calling for additional power requirements, including construction of transmission. Without fully assessing these issues, the EIS would probably not be evaluating the impacts associated with addressing Endangered Species Act issues at Intake.

Mid-West looks forward to working with the Bureau and Corps in developing an appropriate alternative at Intake.

Sincerely,

Thomas P. Graves
Executive Director
November 10, 2008

Intake diversion Proposal:

This proposal incorporates existing natural features, existing facilities and improvements using natural water flow to alleviate restrictions to the pallid Sturgeon during spawning season.

It is proposed to retain 2/3 of the existing rock diversion, the campground and the boat ramp. There would be a taller, approximately 10 to 12 feet higher than the existing rocks, rock divider at a right angle to the existing dam 450 to 500 feet from the existing canal inlet. This rock wall would be 30 to 50 feet wide and would extend upstream from the existing dam 500 to 700 feet. At the upper end of the rock wall would be the high point of a rock ramp extending downstream incorporating the existing gravel bar to a point approximately 1500 feet from its starting point above the diversion dam. The high point in the rock ramp would be at the same elevation as the existing rocks to maintain even flow through the ramp. It would also allow ample water to spill over the existing diversion to reduce water velocity to a rate acceptable for spawning Pallids to navigate. This diversion would have a balanced effect on the Paddlefish harvest by allowing the harvest of fish to continue in the rock ramp and rapids area, and allowing the paddlefish easier upstream access thus reducing the bunching effect and extending the season to provide for more fishing opportunities and a more balanced harvest.

This plan also involves using a rotating drum type fish screen upstream from the existing water inlet to the canal to keep fish from entering the canal system. Under this proposal the existing inlet would be left intact with the gates remaining closed. By leaving this in place if there should be water distribution problems in the late summer there would be the possibility of opening these gates for water flow without having a detrimental effect on fish populations for the short time they would be used.

As a member of the community and a member of the caviar committee, I am sincerely concerned with the future of the Pallid Sturgeon and the paddlefish populations. I would appreciate careful consideration of this plan because I feel it would be more readily accepted by the Irrigation district, landowners, and sportsman while still accomplishing the goals set forth by the ESA. I also feel that by using the natural flow of the river it would be less invasive and easier to maintain than other proposed plans.

For your consideration,

Darrell G. Hystad
Intake Diversion Alternative Proposal 11-10-88
by Darrell Hystad

This point at the same elevation as existing rock dam.

Concrete assisted upper ramp

Top end of rock ramp 1500 to 2000 ft.
using existing cooke bar

200 to 250 ft.
wide gradual rock ramp

Existing dam

30-50' Rock

50 ft.
above existing
rock dam elevation

Dewatering gates

Dock area

Boating area

Campground area

Base ground area
For Montana fishing and hunting details, consult the Montana Fish, Wildlife and Parks Department, Helena Montana.

www.glendivechamber.com

Glendive, MT 59330
808 N. Merrill
Yellowstone Caviar Project

Get On Paddleshiking
Fishing, the sport that has thrilled generations of eager anglers, has become a unique experience near Glendive, Montana. Situated on the plains of Eastern Montana, 17 miles north of this friendly community, the Yellowstone Intake Diversion Dam has become famous as the "Paddlefishing and Caviar Capitol of the World".

From May 15 thru June nearly 3000 fishermen annually pit their strength and angling skills against this small stretch of the Yellowstone River. These murky, roiling waters are home to the spawning paddlefish. It takes a special fisherman with heavy duty tackle to challenge this resident inhabitant of the river, but the rewards far out weight the effort. Adult Paddlefish can weigh from 60-160 pounds. Once snagged they give chase that can last well over an hour.

Modern Paddlefish are an excellent example of ecological adaptation. Fossil records of the Polyoden Spathula, the prehistoric ancestor of the Paddlefish indicate a number of structural similarities.

The most striking common feature is the paddle-shaped snout that can grow up to two feet in length. It is widely believed that this paddle contains sensory receptors that enable the Paddlefish to navigate in murky waters and detect plankton for consumption. Because Paddlefish feed on microscopic organisms, they cannot be caught by conventional fishing methods. Live bait and lures are useless against these formidable foes...

They must be snagged.

The necessary rigging is unique for river fishing: several 8/0 or smaller treble hooks, 40-80# test line, a heavy duty surf rod 8-12 feet long, a heavy duty salt water spinning reel or star-drag reel, and 4-6 oz weights. Despite the unconventional fishing methods, their prehistoric origins and rather homely appearance, Paddlefish are an excellent tasting fish. A Paddlefish can yield a large quantity of top-quality meat. The meat can be frozen, canned, poached, steamed, smoked, baked, or sliced into steaks and grilled. Your only limits are taste and imagination.

Since 1990 Paddlefish roe has been harvested, processed into caviar and shipped from Glendive to several states and as far away as Japan.

Fisherman are encouraged to donate the roe to the Glendive area Chamber of Commerce and Agriculture in exchange for the cleaning of their Paddlefish.

The caviar is sold worldwide with proceeds used to fund non-profit organizations in the area, to improve fisheries and recreation in Eastern Montana, and for research.

Plan your fishing trip to Glendive and snag the biggest fish of your life.

For more information contact Glendive Chamber of Commerce and Agriculture.
Hello Jeff, I am concerned about possible repercussions rerouting might have on the Yellowstone Valley RR and the customers we service here in the Sidney, Mt area. Disruption of service however briefly might well spell disaster for our operation and the businesses that depend on us. Your feedback as to possible scenarios would be appreciated. Thank you for your time.

Sincerely Travis Dimond
Re: Intake Dam modification project

I have reviewed the options being considered to modify Intake Dam to accommodate the spawning of the Pallid Sturgeon. I would like to express my opposition to any option that would use electric pumps to fill the Lower Yellowstone Irrigation Canal.

America is in an energy crisis. We are running short of electricity in our area, and the transmission lines are already nearly full. The drought of the last several years has reduced generation of hydro-power to less than half of normal. It is a real contradiction to ask people to turn their thermostats down and to use CFL light bulbs to save energy and then waste it to do the job of filling the canal, which gravity has filled for the past 100 years free of charge.

I would encourage the Bureau to consider some of the other more practical options, such as the rock ramp, that could do the job at lower long-term financial impact to our area.

Allen Thiessen
President
Lower Yellowstone REA, Inc.
November 6, 2008

To Whom it may concern:

Subject: Intake Diversion Dam

I attended the public meetings on Oct. 21st in Sidney, Mt. and Oct. 22nd in Glendive, Mt and also attended the site at the Intake Dam, located at Intake, Mt. (where I live). Representatives from the U.S. Army Corps of engineers and the Bureau of Reclamation were there to explain the purpose of the project for the proposed federal action is to create a passage upstream for the endangered pallid sturgeon and other native fish to minimize fish entrapment into the irrigation canal system, and continue the authorized operation of the Lower Yellowstone Project and ensure those operations comply with the endangered species act.

Four proposals were presented to the public that would have a great impact to changing the course of the river, and some consumers living close to the dam and the main canal. The impact to this area would greatly suffer. First of all would be irrigation with additional cost to consumers and the camping ground as many people of the local area enjoy fishing and camping with the families. During the paddlefish season our area receivers the benefits for many projects in our area that the caviar program provides. We do not have many areas in this part of Montana to enjoy with our families out doors. I feel there could be alterative options then to remove the dam as this system has worked so well for everyone and there could be some type of system in place that the fish could be put back in the river that would not affect the rancher and farmer and be less costly.

Lou Temple
102 Road 551
Glendive, Mt. 59330
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name

Lavada Tunnell

Organization and Address

Housewife - 466 Road 551

Glendive, MT, 59330 (I actually live at Intake)

Phone (406) 687-3466 FAX E-mail jltunnell@midrivers.com

Comments:

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Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRRYELL@gp.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
To whom it may concern:

I have several concerns with the modification of the Intake Dam.

1. The cost - at a time when our country is in a serious financial crisis. I think the tax dollars can be put to better use. The reason I say this is because from what I’ve heard and read in reports - they hope this project will be a success. They don’t offer any actual facts that this will succeed. We have seen other attempts around the country that have failed when they have spent millions of dollars trying to save a fish or some other species, without knowing for certain that their plan would succeed.

2. The cost to area ranchers and farmers. They already pay higher cost for fuel, fertilizers, etc., just about every expense for operating has gone up. Now they are facing a possible increase for irrigating. While expenses increase at an alarming rate – the markets are falling. The gravity flow of the existing canal has worked for over 100 years and at a low cost to the area ranchers and farmers. If it isn’t broke, don’t fix it. As I said before. We weren’t given any actual facts to say making and change will succeed for sure.

3. Some of the proposals offered could possibly have serious cost of land for some of the land owners nearest the dam site. For a cattle rancher, having a good feed base is very important. It can make or break an operation. Two of the proposals offered would destroy valuable hay ground. Irrigated river bottom is where most of us raise our hay for our cattle.

At the meetings most of the concerns expressed were for the welfare for the fish and recreation, then the farmer and rancher. This country can’t survive without supplying it’s own food. When our own farmers and ranchers can’t afford to stay in business anymore we will be at the mercy of other countries who don’t care about us. Some even hate us. At the meetings we were led to believe that the decrease in the population of pallid sturgeon was due to the fact that they couldn’t make it up over the dam to spawn. I talked to a biologist after the meeting and I asked him where the sturgeon does spawn? He told me that they spawn down the river about 50 miles at Fairview, MT. They have offered no information to indicate that the fish would spawn further up the river, if they do modify the dam. Truthfully. I don’t think they even know for sure if that will change the spawning habits of the fish. They gave no indications that the fish were spawning further up the river before the dam was put in.

From what I read in one report, there is still an awful lot they don’t know about this fish and that was supported by what was said at the meetings. By the engineers own admissions they don’t know if any of the proposals will work. So from where I stand - it’s way too much money to spend on a MAYBE it will work project. Especially when the cost will be pasted on to those who will feel it the most and benefit from it the least.

Last but not least. What are we passing down to our children and their children? Will they ever see the end of all the debts this generation has already piled on their futures? What is their futures going to be like? Does the survival of this fish have any harmful impact on the welfare of this world? Or this country and it’s future?

Spending million to MAYBE save a fish, when the money could be better spent to pay this countries debts, just doesn’t make any sense to me.

When they can offer a proposal that they know for sure will work, and won’t pass on the high cost to the ranchers and farmers. I’d be glad to support that. The way things are
Ranchers and Farmers should be put at the top of the Endangered Species List. Bet we won't ever see that happen.

We need proof that whatever solution is offered will work. I don't want to see this fish gone or any other species, but we need to put the welfare of the human race first. There is no species on this earth that will be looking out for us, if we don't do it for ourselves.

People will always be more important.

Thanks for taking the time to read this and to consider what I have said.

Sincerely,

[Signature]

[Name]
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name  Mike Carlson

Organization and Address  112 25th Street
                            Glendive, MT, 59330

Phone (406) 227-2174  FAX  E-mail mc Carlson@emidrivers.com

Comments:

Overall Project Comments:

All citizens here are concerned about this project's effects on our communities, the continued use of our natural resources, the huge cost of the study & the alternatives if implemented.

Many county & regional plans for much needed economic & human development have been done here in the last 5 years. No one here ever commented that the Intake Diversion Project Headworks were a problem. Everyone here recognizes this as an important asset for agriculture & for paddle fishing, camping & other fishing opportunities.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@gs.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
November 10, 2008

Ms. Paula Holwegner
Bureau of Reclamation
P.O. Box 30137
Billings, MT 59107

Dear Ms. Holwegner,

The Sidney Area Chamber of Commerce and Agriculture wishes to provide these comments on the Intake Diversion Dam Modification, Lower Yellowstone Project, Montana.

The Lower Yellowstone Irrigation Project is a very important part of life in Eastern Montana. It is the “life-blood” of Sidney and Richland County. This water provides five hundred plus farmers the opportunity to increase the level of production, and produce a higher valued variety of crops. Most of Eastern Montana does not have this resource available to them.

The creation of the Lower Yellowstone Irrigation Project has evolved into a unique economy of its own. Sidney is reliant on the business that is shaped from high value crops, and its related agribusiness. There are very few people not touched by this ripple effect.

The Sidney Area Chamber of Commerce and Agriculture asks that the Intake Diversion Dam Modification take into account how important this project is to the people of the area. Please give water-users and communities of this area as much concern in this discussion as the wildlife being protected.

Sincerely,

Wade J. VanEvery
Executive Director.
Ref: 8MO

November 6, 2008

Bureau of Reclamation
Montana Area Office
Attention: Paula Holwegner,
P.O. Box 30137
Billings, Montana 59107

Re: EIS Scoping Comments for Intake Diversion Dam Modification, Lower Yellowstone Project, Montana

Dear Ms. Holwegner:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the September 12, 2008 Notice of Intent by the Bureau of Reclamation to prepare an Environmental Impact Statement (EIS) for the Intake Diversion Dam Modification, Lower Yellowstone Project, in Montana. The EPA reviews EIS's in accordance with its responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. 4231, and Section 309 of the Clean Air Act, which directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action significantly affecting the human environment.

The EPA supports preparation of an EIS to analyze and disclose effects associated with proposed modifications to Intake Diversion Dam to improve fish passage and reduce entrainment of endangered pallid sturgeon and other native fish in the lower Yellowstone River. At this early stage in the preparation of the EIS we are transmitting EPA EIS guidance and scoping comments for your consideration, as well as a brief summary of EPA’s DEIS rating system (see enclosed).

We want to make particular note of the need to evaluate lower Yellowstone River water quality conditions that may affect the endangered pallid sturgeon and other fish species, along with fish passage concerns. Montana’s Clean Water Act Section 303(d) list of impaired waters identifies the Yellowstone River segment below the Lower Yellowstone Diversion Dam downstream to the North Dakota border (71.1 mile river segment) with water quality impairments to warm water fishery and aquatic life uses. The Montana Dept. of Environmental Quality (MDEQ) lists the probable causes of
We believe it will be important for the EIS to evaluate and discuss water quality and pollutant levels and related impacts to aquatic life and fishery uses in the lower Yellowstone River, along with the fish passage and entrainment issues. The extent to which the existing configuration of Intake Diversion Dam retards recovery of the endangered pallid sturgeon due to the fish passage barrier/entrainment vs. potential water quality/pollutant-related causes and sources of impairments should be thoroughly evaluated and discussed in the EIS (i.e., chromium, copper, lead, nitrogen, phosphorus, TDS, pH, sedimentation/siltation, temperature, etc.). Efforts to improve fish passage with dam modifications and reductions in fish entrainment may not achieve the level of expected recovery of the endangered pallid sturgeon if degraded water quality is also a significant cause of fisheries impairment. It may be that impairments related to pollutant levels and degraded water quality in the lower Yellowstone River will also need to be addressed to achieve effective recovery of the endangered pallid sturgeon.

We also recommend that the Clean Water Act Section 404(b)(1) Guidelines be integrated into the NEPA process to reduce potential for project delays. At this early stage of project development, it is difficult to evaluate the potential for various preliminary alternatives to qualify for the 404(f)(1)(C) irrigation ditch construction/maintenance exemption, and it appears to us that some of the alternatives being considered have potential to meet the requirements of the Section 404(f)(2) recapture provision so that a 404 permit would be required.

The CFQ NEPA implementing rules state that Federal agencies should to the fullest extent possible integrate NEPA with other environmental review procedure so that they run concurrently rather than consecutively (40 CFR 1500.2(c)). Accordingly, we recommend that the EIS include a 404(b)(1) evaluation of the preferred alternative as an appendix to help assure that the EIS adequately covers 404(b)(1) criteria to allow permitting of the NEPA selected alternative. If the NEPA and Clean Water Act Section 404 processes are separated, the NEPA-selected alternative may have to be redone if it does not include the “least damaging practicable alternative.” Fulfilling the requirements of all applicable laws concurrently should ultimately save time and resources, which is particularly essential for this time critical project intended to prevent extirpation of the endangered pallid sturgeon.

Our more detailed EIS guidance and scoping comments (enclosed) discuss these issues in greater detail as well as other potential issues and concerns that we believe should be considered for this project, as well as information to assist in addressing NEPA
requirements, and environmental and public involvement requirements of State and Federal laws, regulations and policies. Our experience has shown that when environmental concerns are thoroughly evaluated, the EIS is a more meaningful document that will result in better decisions. We appreciate the opportunity to provide EIS guidance and comments, and look forward to review of the DEIS for this project.

If you have any questions regarding our scoping comments you may contact Mr. Steve Potts of our office in Missoula at 406-329-3313 or in Helena at (406) 457-5022, or via e-mail at potts.stephen@epa.gov. Thank you for your willingness to consider our comments at this stage of the process.

Sincerely,

[Signature]

John F. Wardell
Director
Montana Office

Enclosures

cc: Larry Svoboda/Connie Collins, EPA, 8EPR-N, Denver
Greg Hallsten/Dean Yashan/Jeff Ryan, MDEQ, Helena
ENCLOSURE

U.S. Environmental Protection Agency (EPA), Region 8, Montana
Office EIS Guidance and Scoping Comments for Intake Diversion Dam
Modification, Lower Yellowstone Project

The EPA appreciates the effort and resources that are committed to the
preparation of EIS's and hopes to facilitate the process with this EIS guidance and
scoping comments. This information is intended to provide a scope of issues, consistent
with EPA's concerns to help assure full public disclosure of all foreseeable direct,
indirect, and cumulative environmental impacts and mitigation, and consistency with
environmental and public involvement requirements of State and Federal laws, Executive
Orders and policies. We hope this will lead to an improved decision-making process for
selecting among alternatives. The twin goals of the National Environmental Policy Act
(NEPA) to consider environment effects and inform the public are not met without a
disclosure of effects of proposed actions on the environment. These comments also
provide insight into issues EPA may evaluate when it reviews the draft EIS. See CEQ's
NEPA guidance at http://ceq.eh.doe.gov/NEPA/regs/guidance.html and

When the draft EIS (DEIS) is issued, EPA will review it in accordance with its
authorities under the National Environmental Policy Act (NEPA) and Section 309 of the
Clean Air Act. Included with EPA's DEIS review comments will be a rating of both the
environmental impact of the proposed action and the adequacy of the analysis and
disclosure of potential environmental impacts in the DEIS. Please see the enclosed brief
summary describing EPA's DEIS rating system. With its broad review charge, EPA is
not limited in its comments to only the spectrum of laws and regulations for which it has
a primary regulatory role. Comments on any aspect of the EIS and supporting documents
may be appropriate, although ordinarily the most substantive comments continue to be in
areas where EPA has a specific regulatory mission. Our scoping comments are divided
into two sections: NEPA Issues and Resource Issues.

NEPA ISSUES

1. Purpose and Need

EIS documents should have a clear and logical Purpose and Need Statement.
Comparison of existing conditions with desired future conditions can support descriptions
of the purpose and need. There should also be an adequate explanation of the rationale
for the establishment of the analysis area boundary. The analysis area should include the
environment potentially affected by implementation of the alternatives and should be a
logical unit for projecting and measuring effects. Potential impacts to water quality,
fisheries, river hydrology and geomorphology, aquatic and terrestrial habitats, including
special habitats such as wetlands, riparian areas, and cottonwood galleries, biodiversity,
air quality, etc., may extend beyond the immediate project area. An appropriate analysis
area should encompass the potentially affected environment, and should be able to serve
as a baseline to compare projected impacts and for measuring actual effects. Also, the official(s) responsible for the decision should be identified.

2. Alternatives

The EIS should support the purpose and need with a range of reasonable alternatives that will meet the objectives of the purpose and need, and address resource and environmental issues and public concerns. In accordance with NEPA (40 CFR 1502.14) the EIS should:

a. Rigorously explore and objectively evaluate all reasonable alternatives.
b. Include reasonable alternatives not within the jurisdiction of the lead agency.
c. Include a no action alternative.
d. Identify the agency’s preferred alternative(s).
e. Include appropriate mitigation measures not already included in the proposed action or alternatives.
f. Include appropriate mitigation measures.

We recommend that tables, maps, figures, charts, photos, etc., be used as much as possible and wherever appropriate to present and display information and specific features of alternatives so that the various alternatives can be clearly understood (e.g., mitigation measures, prescriptions, limitations, habitat requirements, monitoring requirements, funding, etc.). It is helpful if the rationale for mitigation and monitoring measures are discussed, since such rationale may enhance public understanding and better achieve the public disclosure purpose of the EIS, and may better explain public trade-offs involved in making resource management decisions. Maps that show land ownerships, including lands adjacent to the river and irrigation ditch, and land characteristics and sensitive features (e.g., rivers, streams, wetlands and other special habitats, 303(d) listed waters, topography, farmlands, irrigation ditches, roads, railroads, etc.,) are particularly useful.

We highly recommend that an alternatives matrix table that summarizes major features and significant environmental impacts of alternatives be provided to facilitate understanding of the alternatives, particularly distinctions between alternatives, and provide comparative evaluation of alternatives in a manner that sharply defines issues for the decision maker and the public to make in regard to a reasoned choice among alternatives.

Mitigation and Monitoring

A comprehensive discussion of proposed mitigation for direct, indirect and cumulative impacts is required by the CEQ Regulations (40 CFR 1502.16(b), 1502.14(f), 1508.7), including the effectiveness of mitigation measures in minimizing adverse effects. Simply listing the mitigation measures is insufficient to qualify as the reasoned discussion and “hard look” required by NEPA. Mitigation measures must be discussed in sufficient detail to ensure that potential detrimental environmental effects and measures to mitigate
those effects have been fairly evaluated. Anticipated effectiveness in accomplishing the planned fish passage improvements and entrainment reduction project purposes should be described. Fish passage effectiveness is particularly important for this project since the ability of the endangered pallid sturgeon to move upstream on a low gradient rock ramp or across other river structures that may be needed to raise river levels to maintain the irrigation diversion at low flows (e.g. drop structures) for some of the other alternatives is not well known.

Monitoring plans are also needed for determining achievement of project objectives and effectiveness of mitigation measures (quantitatively-if possible, and/or a qualitatively); and determining the need for potential additional project and/or mitigation measure modifications. We support use of adaptive management principles with the alternatives. Potential funding sources and likelihood of funding for monitoring and adaptive management and for implementation of potential needed project modifications and/or mitigation measures should also be identified.

3. Existing Conditions

The EIS should succinctly describe the existing conditions within the analysis area. The discussion of existing conditions should include, but are not limited to a discussion of existing:

1. Water Resources (water quality, hydrology, geomorphology, fisheries, including fish passage, aquatic habitat, TMDLs, wetlands/riparian areas, irrigation water diversions, timing, usage, return flows, monitoring/adaptive management)
2. Vegetation (riparian areas, cottonwood galleries, grasslands, agricultural lands, including irrigated lands, noxious weeds)
3. Wildlife/T&E Species Analysis (biodiversity)
4. Land Use (access roads, railroads, agricultural lands, recreation)
5. Tribal Coordination

More detailed information on these topics follows in the "Resource Issues" section.

4. Environmental Consequences

This section of the EIS should present the environmental impacts of the alternatives. NEPA requires an evaluation of the proposed action and its reasonable alternatives on the environment as a whole. All activities and associated impacts related to project implementation must be disclosed. Statements made in the assessment should be substantiated either by data and analysis included in the document, or by reference to readily available supporting documents. Environmental analysis documents should reflect the level of analysis and data compilation actually completed, so that the reviewer is able to establish whether data exists to support conclusions within the analysis. The effects analysis should be able to stand on its own. If taken out of the context of the EIS, the reader should be able to know what specific area is being affected.
The EIS should include a discussion of unavoidable adverse environmental effects, short-
term and long-term environmental considerations, and any irreversible or irretrievable
commitments of resources which would be involved in the proposal should it be
implemented. This section should address (40 CFR 1502.16):

- Direct effects and their significance.
- Indirect effects and their significance.
- Possible conflicts between the proposed action and the objectives of
  Federal, regional, State, and local (and in the case of a reservation, Indian
  tribe) land use plans, policies and controls for the area concerned.
- The environmental effects of alternatives including the proposed action.
  (The baseline condition of the resource of concern should include a
description of how conditions have changed over time and how they are
likely to change in the future with and without the proposed action.)
- Energy requirements and conservation potential of various alternatives and
  mitigation measures.
- Natural or depletable resource requirements and conservation potential of
  various alternatives and mitigation measures.
- Effects to Historic and cultural resources.
- Means to mitigate adverse environmental impacts.

We note that identification of the fish species present in the lower Yellowstone River in
the project area, and their ability to move upstream and downstream across the existing
Intake Dam and with the proposed alternatives should be thoroughly evaluated and
discussed. As stated earlier, the probable effectiveness of proposed alternatives in
providing for movement or passage of the pallid sturgeon and other fish species upstream
and downstream should be estimated and disclosed.

**Cumulative Effects**

NEPA requires that cumulative impacts be addressed as a summary of the individual
impacts of this and all other past, present, and "reasonably foreseeable" future projects,
including activities on private adjacent land irrespective of what agency/entity has
decision-making authority or analysis responsibility. In January 1997 the President’s
Council on Environmental Quality (CEQ) published, "Considering Cumulative Effects
Under the National Environmental Policy Act", guidance that provides a framework for
analyzing cumulative effects (see at [http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm](http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm)).
In May 1997 EPA published a document entitled, "Consideration of Cumulative Effects
in EPA Review of NEPA Documents." This document can be found at

A common inadequacy of environmental analyses is the lack of analysis or disclosure of
the sum of individual effects of all projects on the local environment. A summary listing
of other projects occurring in the vicinity without the accompanying analysis is
insufficient. Another inadequacy is that Agencies often tend to limit the scope of their
analyses to those areas over which they have direct authority or to the boundary of the relevant management area or project area. This may not cover the effects to the area or resources of concern. Moreover, 40 CFR Section 1502.14(c) also requires agencies to include reasonable alternatives not within their jurisdiction, so that all potentially reasonable alternatives are evaluated, even if they may require modification of Congressional approval or funding. EPA considers five key areas of information in reviewing cumulative effects analyses:

1. Clear identification of resources being cumulatively impacted and the geographic area where impacts occur. While a broad consideration of resources is necessary for adequate assessment of cumulative impacts, the analysis should be focused on those resources that are significantly impacted.

2. Use of appropriate analysis area boundaries for the resource and time period over which the cumulative effects have occurred or will occur. Ecological requirements may extend beyond the boundaries of the project area, but reasonable limits should be made to the scope of the analysis.

3. Identify impacts that are expected to resources of concern in each area from the proposed management direction through analysis of cause-and-effects relationships. The analysis should consider how past and present activities have historically affected and continue to affect the resources, ecosystems, and communities of concern. The baseline condition of the resource of concern should include a description of how conditions have changed over time and how they are likely to change in the future with and without the proposed action (include adequate evaluation vs. benchmark or baseline or reference conditions).

4. Identify other actions—past, present, and reasonably foreseeable future actions—that have had or are expected to have impacts in the same area, and the impact or expected impacts from these other actions, regardless of what agency (Federal or non-Federal) or person undertakes such actions, identify all the direct and indirect effects that are known, and make a good faith effort to explain the effects that are not known but are reasonably foreseeable. Even unrelated actions conducted on adjacent private lands, if they contribute to cumulative effects on a resource, should be incorporated into the analysis. Good cumulative effects analysis requires close coordination among agencies and the public to ensure that all past, present and reasonably foreseeable future actions are considered. Reasonably foreseeable future actions need to be considered even if they are not specific proposals. The criterion for excluding future actions from analysis is whether they are "speculative." In general future actions can be excluded from the analysis of cumulative effects if: a) the action is outside the geographic boundaries or time frame established for the cumulative effects analysis; b) the action will not affect resources of concern that are the subject of the cumulative effects analysis; and c) including the action would be arbitrary.
5. Identify and disclose the overall cumulative impacts that can be expected if the individual impacts are allowed to accumulate, and provide comparisons of cumulative impacts for the proposed management direction and the reasonable alternatives in relation to the no action alternative and/or an environmental reference point. The analyses should provide a clear basis for choice among options by the decision maker and the public. Monitoring should be put in place to evaluate predictions and mitigation effectiveness.

The cumulative effects analysis should also include development of mitigation measures to reduce cumulative impacts. Reducing cumulative effects requires repeated testing of the effectiveness of mitigation measures. Cumulative effects analysis, therefore, should be an iterative process in which consequences are assessed repeatedly following incorporation of avoidance, minimization and compensation measures into alternatives.

Tribal Coordination

Executive Order 13175, “Consultation and Coordination With Indian Tribal Governments,” was issued to assure meaningful consultation/collaboration with tribal officials in the development of Federal policies with tribal implications, and to strengthen U.S. government-to-government relationships with Indian tribes. The U.S. has a unique relationship with tribal governments which requires that Federal government plans, projects, programs and activities assess impacts on tribal trust resources, and carry them out in a knowledgeable, sensitive manner respectful of tribal self-government and sovereignty, and agencies are directed to have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications. Trust resources are located within the exterior boundaries of reservations and outside the reservation in Usual and Accustomed fishing and hunting areas.

Agencies should assess all impacts to tribal trust resource and include those impacts in the agencies' environmental documents, and should consult to the greatest extent practicable and to the extent permitted by law, with tribal governments prior to taking actions that affect federally recognized tribal governments. The environmental document shall fully disclose the potential environmental impacts, both negative and positive, on tribal trust resources.

Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires that Federal agencies make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations. Environmental justice encompasses a broad range of impacts covered by NEPA, including impacts on the natural or physical environment and interrelated social, cultural,

Resource Issues

Water Quality and Aquatic Species

The EIS should clearly describe surface waters and existing beneficial water uses (type, amount and location) in the project area. The EIS should summarize existing baseline Yellowstone River water quality conditions, since baseline water quality data and beneficial use support may be key in the evaluation of impacts. **We recommend that watersheds, rivers and streams be identified on maps of the various alternatives to clearly convey their relationship with project activities.**

Water Quality Standards (WQS) are primary regulatory mechanism used to achieve Clean Water Act goals. WQS establish designated uses for water bodies (or water body segments), support the uses with narrative and numerical water quality criteria, and protect high water quality with an Antidegradation or Nondegradation Policy. Proposed projects should be planned and designed to protect water quality to maintain and/or attain compliance with WQS. Montana WQS are found in the Administrative Rules of Montana (ARM) 17.30 Subchapter 6, with the Montana Nondegradation rules are found in ARM 17.30 Subchapter 7. Montana’s Nondegradation Rules and EPA’s Antidegradation policy (40 CFR 131.12) are intended to assure that existing high surface water quality and designated water uses will not be degraded.

Potential chemical, physical and biological effects of proposed activities should be evaluated and disclosed. Chemical effects include effects such as temperature, nutrients, pH, dissolved oxygen, metals, salinity, conductivity, etc. Physical effects include suspended sediment and turbidity as well as habitat impacts on stream structure and bank/channel stability, streambed substrate including seasonal and spawning habitats, pool/riffle habitat, streambank vegetation, riparian habitats, peak flows, channel condition, and spawning and rearing habitat. Biological effects include the species and abundance of fish present, and the richness and composition of other aquatic biota and communities (e.g., macroinvertebrates, periphyton).

Fisheries information such as fish species present, estimated populations or abundance of each species, habitat conditions, productivity and quality of habitats, connectivity, barriers to fish migration, spawning or nursery areas, fisheries conservation priorities, etc. Particular attention should be focused on the endangered pallid sturgeon. Other important recreational fishery resources such as paddlefish should also receive attention in the EIS.

The EIS should evaluate the different flow and habitat needs of the fish species present in the Yellowstone River, and develop alternatives and measures that protect and enhance habitats and habitat connectivity for these many species. Adequate knowledge about the ecology and life requisites of all the aquatic species involved, and how these species are
affected by alteration of their habitat should be collected and presented. Habitats should
be addressed across the life history of a species. Alternatives and conservation measures
should be based on valid scientific information, as much as possible rather than on
speculative or unproven technology.

We recommend that the Bureau of Reclamation and Corps of Engineers in association
with the U.S. Fish & Wildlife Service and Montana Department of Fish, Wildlife & Parks
consider development of measurable biological objectives and clear biological criteria to
define project success. Estimates of the extent of fish passage and additional river habitat
increases that are likely to result from proposed dam modification should be provided.

The EIS should also evaluate and discuss Yellowstone River hydrology, flow variations,
diversions, stability, and geomorphology in the area of the Intake Diversion Dam as well
upstream and downstream. Discussions should consider river gradients, pool/riffle
features, sinuosity, channel stability, diversions, and local geology and topography as
needed to adequately describe potential impacts to water quality, fisheries, aquatic
habitat, recreation, agricultural operations, and other resources from the implementation
of specific alternatives.

An analysis of the environmental effects of proposed projects should show consistency
with the goals and objectives of the Clean Water Act to “restore and maintain the
chemical, physical, and biological integrity of the Nation’s waters,” and have “water
quality which provides for protection and propagation of fish, shellfish, and wildlife,
and provides for recreation in and on the water.”

303 (d) listed Waters

Special attention should be focused on water bodies with impaired or threatened uses
listed by the State of Montana under Clean Water Act Section 303(d). Information on
Montana’s 303(d) listed waters can be found on-line at
http://www.deq.state.mt.us/CWAI/default.aspx . The EIS should identify affected
water bodies in the project area that have been placed on the Montana 303(d) list, and
discuss the causes, sources and magnitude of impairments to beneficial uses.

We note that Montana’s 303(d) list identifies the Yellowstone River from the Powder
River downstream to the Lower Yellowstone Diversion Dam (78.4 miles) with use
impairment, identifying partial support of warm water fishery uses for this river segment.
The probable cause of use impairment is listed as a fish passage barrier with the probable
source listed as dam construction. The MDEQ website indicates that aquatic life uses in
this segment of the Yellowstone River were not assessed.

The Yellowstone River segment below the Lower Yellowstone Diversion Dam
downstream to the North Dakota border (71.1 miles) is also listed with use impairments,
with only partial support of warm water fishery and aquatic life uses. We note that this
lower segment of the Yellowstone River includes both warm water fishery and aquatic
life use impairments, and pollutant causes as well as the fish passage barrier cause of
impairment. It is not clear to us why aquatic life uses below the dam are listed as impaired, but above the dam are identified as not assessed.

The MDEQ lists the probable causes of water quality impairment for the Yellowstone River below the diversion dam as chromium, copper and lead from unknown sources; as well as nitrogen, phosphorus, pH, and total dissolved solids from unknown sources; and alteration in stream-side or littoral vegetative covers and sedimentation/siltation, with the probable sources listed as irrigated crop production, rangeland grazing, and streambank modifications/disturbance. In addition, that fish passage barrier is also identified as a probable cause of impairment, with impacts from hydrostructure flow regulation/modification listed as probable source in this lower river segment.

We recommend contacting the MDEQ to validate the waterbodies listed as impaired or threatened in the project area (contact Michael Pipp of MDEQ in Helena at 406-444-7424). In addition we suggest discussing the probable causes and sources of use impairments, along with the magnitude of these use impairments, and their relevance to this proposed Intake Dam modification project, and the varied assessment above and below the dam (contact Dean Yashan at MDEQ Watershed Management Section at 406-444-5317, and Mr. Robert Ray, MDEQ Watershed Protection Section at 406-444-5319).

We believe it will be important for the EIS to evaluate and discuss water quality and pollutant levels and related impacts to aquatic life and fishery uses in the lower Yellowstone River, along with fish passage and entrainment issues. The extent to which the existing configuration of Intake Diversion Dam retards recovery of the endangered pallid sturgeon due to the fish passage barrier vs. other potential pollutant related causes and sources of impairments should be thoroughly evaluated and discussed in the EIS (i.e., chromium, copper, lead, nitrogen, phosphorus, TDS, pH, sedimentation/siltation, etc.). Efforts to improve fish passage with dam modifications and reductions in fish entrainment may not achieve the level of expected recovery of the endangered pallid sturgeon if degraded water quality is also a significant cause of fisheries impairment. It may be that impairments related to pollutant levels and degraded water quality in the lower Yellowstone River will also need to be addressed to achieve effective recovery of the endangered pallid sturgeon.

Total Maximum Daily Loads (TMDLs)

Stream segments designated as “water quality impaired” and/or “threatened” listed on State 303(d) lists require development of a Total Maximum Daily Load (TMDL). A TMDL:

Identifies the maximum load of a pollutant (e.g., sediment, nutrient, metal) a waterbody is able to assimilate and fully support its designated uses; allocates portions of the maximum load to all sources; identifies the necessary controls that may be implemented voluntarily or through regulatory means; and describes a monitoring plan and associated corrective feedback loop to insure that uses are fully supported.
Or can also be viewed as, *the total amount of pollutant that a water body may receive from all sources without exceeding WQS*; or may be viewed as, *a reduction in pollutant loading that results in meeting WQS*.

It is our understanding that a TMDL has not yet been started by the MDEQ for the Lower Yellowstone River. However, it will still be important to discuss proposed Intake Diversion Dam Modification activities with MDEQ’s TMDL staff to assure that the proposed project will be consistent with the State’s development of a TMDL and Water Quality Plan for the Lower Yellowstone River (contact Dean Yashan at MDEQ Watershed Management Section at 406-444-5317, and Mr. Robert Ray, Watershed Protection Section at 406-444-5319). Aquatic/water quality effectiveness monitoring activities that have been, are, or will be, carried out to evaluate the project’s effects on 303(d) listed streams should also be summarized.

It is our understanding that a TMDL is not required for the Yellowstone River 303(d) listed segment above the diversion dam, since the use impairment for that segment is not listed as being caused by pollutant delivery, but rather is listed as being caused by the fish passage barrier. Although, we note that aquatic life uses in this upper segment of the river were not assessed. It is not clear to us why aquatic life uses in the river segment below Intake Dam are listed as impaired, and aquatic life uses in the upper segment above the dam are not assessed. From a practical standpoint any pollutant or water quality degradation occurring in the lower Yellowstone River should be evaluated for the entire river segment, above and below the diversion dam, since if degraded water quality conditions exist below the diversion dam they may also be present above the dam. The magnitude and sources of these impairments should be evaluated and disclosed in the EIS.

EPA also supports coordinated planning and analysis of EndangeredSpecies Act and Clean Water Act requirements wherever possible, to integrate efforts to recover and delist threatened and endangered species at the same time that water quality in 303(d) listed waters is restored.

Section 313 of the Clean Water Act requires that Federal agencies comply with State and Local pollution requirements. Therefore, the appropriate State and Tribal Best Management Practices (BMPs) to reduce potential non-point sources of pollution from this project’s proposed activities should be included in the alternatives under consideration and disclosed. Any stream protection strategies that are proposed should be outlined. Watershed or stream restoration or enhancement projects that are proposed as part of the project alternatives should be clearly described.

**Monitoring**

The Bureau of Reclamation and Corps of Engineers should also develop a monitoring plan for evaluating project effectiveness and success, and describe the monitoring and adaptive management program in the EIS. There should be a long-term commitment to
carry out adequate monitoring and data collection to determine whether the fish passage improvement and entrainment reduction goals and objectives of the project are accomplished, and/or modify the project as new information is developed. The EIS should describe whether there are adequate budgets for monitoring and adaptive management.

**Wetlands**

EPA considers the protection, improvement, and restoration of wetlands to be a high priority. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. The EIS should identify wetlands potentially affected by the proposed project. Possible impacts on wetlands include damage or improvement to: water quality, habitat for aquatic and terrestrial life, channel & bank stability, flood storage, ground water recharge and discharge, sources of primary production, and recreation and aesthetics.

Executive Order 11990 requires that all Federal Agencies protect wetlands. In addition national wetlands policy has established an interim goal of No Overall Net Loss of the Nation's remaining wetlands, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base (for information on Federal wetlands policies see websites, [http://www.usace.army.mil/inet/functions/cw/cecw0/reg/citizen.htm](http://www.usace.army.mil/inet/functions/cw/cecw0/reg/citizen.htm) and [http://www.epa.gov/OWOW/wetlands/index.html](http://www.epa.gov/OWOW/wetlands/index.html).)

The EIS should clearly describe the existing wetlands within the analysis area their acreage, type and ecological role and how both acreage and function will be affected. The EIS should describe impacts to wetlands, and explain how impacts, if any occur, will be mitigated (i.e., mitigation means sequence of avoidance, minimization, rehabilitation, and then compensation for unavoidable impacts). Heavy equipment use in wetland areas should be avoided or restricted to winter time use on frozen ground/snow when adverse effects of compaction and erosion will be minimized.

**Riparian Areas**

Riparian habitats, similar to wetlands, are important ecological areas supporting many species of western wildlife. Riparian areas generally lack the amount or duration of water usually present in wetlands, yet are “wetter” than adjacent uplands. Riparian areas increase landscape and species diversity, and are often critical to the protection of water quality and beneficial uses. EPA considers the protection, improvement, and restoration of riparian areas to be a high priority.

Riparian areas should be protected to ensure maintenance of water quality and hydrologic processes; maintenance of the physical integrity of aquatic ecosystems; adequate amounts and distribution of woody debris sufficient to sustain physical and biological complexity; adequate summer and winter thermal regulation; appropriate amounts and distributions of source habitats for riparian- or wetland-dependent species; and maintenance of naturally functioning riparian vegetation communities. Protection of Yellowstone River
cottonwood galleries are a riparian resource worthy of special attention during the EIS evaluations.

**NEPA/CWA Section 404 Merger**

The EIS should recognize that discharge of fill material into wetlands and other waters of the United States is regulated by Section 404 of the Clean Water Act, 33 U.S.C. 1344, which is administered jointly by the U.S. Army Corps of Engineers and EPA. Section 404 permits from the Corps of Engineers are required where dredge or fill activity is proposed in waters of the United States. Section 404(f)(1)(C) exempts the discharge of dredged or fill material for the purpose of construction or maintenance of irrigation ditches from 404 permit requirements. We note, however, any discharges of dredged or fill material into navigable waters incidental to any activity having as its purpose bringing an area of navigable waters into a use to which it was not previously subject, where the flow and circulation of navigable waters may be impaired or the reach reduced, is required to obtain a 404 permit (Section 404(f)(2)).

At this early stage of project development it is difficult to evaluate the potential for various preliminary alternatives to qualify for the 404(f)(1)(C) irrigation ditch construction/maintenance exemption, and it appears to us that some of the alternatives being considered have potential to meet the requirements of Section 404(f)(2) so that a 404 permit would be required.

The CEQ NEPA implementing rules state that Federal agencies should to the fullest extent possible integrate NEPA with other environmental review procedure so that they run concurrently rather than consecutively (40 CFR 1500.2(c)). We strongly recommend that the Clean Water Act Section 404(b)(1) Guidelines be integrated into the NEPA process to avoid potential for project delays. We recommend that the EIS include a 404(b)(1) evaluation of the preferred alternative as an appendix to help assure that the EIS adequately covers 404(b)(1) criteria to allow permitting of the NEPA selected alternative. If the NEPA and Clean Water Act Section 404 processes are separated, the NEPA-selected alternative may have to be redone if it does not include the "least damaging practicable alternative." Fulfilling the requirements of all applicable laws concurrently should ultimately save time and resources, which is particularly essential for this time critical project intended to prevent extirpation of the endangered pallid sturgeon.

We should also note that if a 404 permit(s) is required to implement the proposed project there would also be a need to obtain appropriate water quality standards certification from the Montana DEQ in accordance with Section 401 of the Clean Water Act (contact Mr. Jeff Ryan of MDEQ in Helena at 406-444-4625).

**Fish&Wildlife/T&E Species**

The EIS should demonstrate coordination with the U.S. Fish & Wildlife Service (USFWS) and Montana Department of Fish, Wildlife & Parks and help assure that alternatives and analyses address issues such as: impacts to quality and capacity of fish &
wildlife habitat, connectivity of fish and wildlife habitat; impacts upon sensitive species and species of special concern; and maintenance of high quality habitats and restoration of degraded habitats. Estimated reductions in impact from mitigation should also be described.

The proposed activities are intended to beneficially affect the endangered pallid sturgeon, and perhaps there could also be effects to other threatened or endangered (T & E) species (e.g., least tern, piping plover, mountain plover, black-footed ferret, etc.). The draft and final EIS's should include the Biological Assessment and the final EIS should include the associated USFWS Biological Opinion or formal concurrence for the following reasons:

(1) NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;

(2) The CEQ Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c) and 1502.25); and

(3) The Endangered Species Act (ESA) consultation process can result in the identification of reasonable and prudent alternatives to preclude jeopardy, and mandated reasonable and prudent measures to reduce incidental take. These can affect project implementation.

EPA generally recommends that a final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative.

Biodiversity

Biodiversity may be a critical consideration for new projects, major construction or when special habitats (i.e., wetlands, threatened and endangered species habitat) will be affected. The state of the art for this issue is changing rapidly. CEQ prepared guidance entitled, "Incorporating Biodiversity Considerations into Environmental Impact Analysis Under the National Environmental Policy Act,"

Noxious Weeds/Exotic Plants

Construction activities that disturb soils create conditions favoring the spread of noxious weeds. Among the greatest threats to biodiversity is the spread of noxious weeds and exotic (non-indigenous) plants. Many noxious weeds can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Since the proposed project is likely to include some construction activities, EPA recommends that the EIS include a strategy for prevention, early detection of invasion,
and control procedures for weeds during and after construction. We also recommend including progress on effectiveness of weed control efforts in the project monitoring.

EPA supports integrated weed management (e.g., effective mix of cultural, education and prevention, biological, mechanical, chemical management, etc.), however, we encourage prioritization of management techniques that focus on non-chemical treatments first, with reliance on chemicals being the last resort. While EPA fully supports control of noxious weed infestations, we want to note that weed control chemicals can be toxic and have the potential to be transported to surface or ground water following application. It is important that the water contamination concerns of herbicide usage be fully evaluated and mitigated. All efforts should be made to avoid movement or transport of herbicides into surface waters that could adversely affect fisheries or other water uses. The Bureau of Reclamation and Corps should assure that herbicides, pesticides, and other toxicants and chemicals would be used in a safe manner in accordance with Federal label instructions and restrictions that allow protection and maintenance of water quality standards and ecological integrity, and avoid public health and safety problems.

Plant seeds can be carried from a source area by the wind, on equipment tires and tracks, by water, on the boots of construction workers, and by wildlife or pack animals. Care should be taken to implement control procedures in all source areas to avoid spread to unaffected areas. Measures for preventing spread from source areas to uninfested areas include:

- Ensure that equipment tracks and tires are cleaned prior to transportation to an uninfested site.
- Focus control efforts at trail heads and transportation corridors to prevent tracking of seed into uninfested areas.
- Attempt to control the spread from one watershed to another to reduce water as a transport vector.
- If a localized infestation exists and control is not a viable option, consider rerouting trails or roads around the infestation to reduce available vectors for spread.
- Establish an education program for industrial and recreational users and encourage voluntary assistance in both prevention and control activities.
- Reseed disturbed sites as soon as possible following disturbance.

We believe that revegetation (reseeding with native grass mix) should occur following construction activities as soon as possible to reduce potential for weed infestation, and control erosion. The goal of the seeding program should be to establish the sustainability of the area. Where no native, rapid cover seed source exists, we recommend using a grass mixture that does not include aggressive grasses such as smooth brome, thereby allowing native species to eventually prevail. Mr. Phil Johnson, Botanist, Montana Dept. of Transportation, in Helena at 444-7657, may be able to provide guidance on revegetation with native grasses.
Air Quality

The Clean Air Act and State Implementation Plans (SIPs) require that air pollution not cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments. If the proposed activities and alternatives may adversely affect air quality, provisions for air quality analysis should be addressed in the EIS. Although we are not aware of specific air quality concerns in the Intake Dam area.

Climate Change

Climate change is an issue of increasing concern that has received much attention recently. The April 2, 2007 Supreme Court Opinion in Massachusetts, et. al. v. EPA, indicated that the Court considers it "reasonably foreseeable" that greenhouse gases (GHGs) produced by man's activities are contributing to climate change. EPA has not yet developed specific guidance with respect to addressing climate change and emissions of greenhouse gases. We are soliciting advice from our EPA National Headquarters in regard to addressing climate change during NEPA analysis. Thus, any preliminary comments we offer may not reflect, and should not be construed as reflecting, the type of judgment that might form the basis for a positive or negative finding under NEPA or the Clean Air Act.

We do want to draw your attention to the draft CEQ guidance regarding consideration of climate change in NEPA documents issued on October 8, 1997, (see this draft guidance at, http://www.mms.gov/eppd/compliance/reports/ceqmemo.pdf). The CEQ draft guidance, while not very recent, may still offer relevant guidance for addressing this issue to meet NEPA disclosure requirements. The CEQ draft guidance indicates that there are two aspects of climate change that should be considered in NEPA documents:

1) Effect of Federal actions on climate change (e.g., increased emissions of GHGs or changes in sinks related to GHGs)

2) Effect of climate change on Federal actions (e.g., rising sea levels, changed hydrology, increased cumulative risks of damage to ecosystems, life, property).

We suggest that the Cumulative Effects section of the DEIS include some analysis and disclosure regarding climate change, particularly effects of climate change on Yellowstone River flows and hydrology and irrigation diversions and practices. If a climate change analysis is omitted or if it is stated that climate change is too speculative it could increase legal vulnerability of project. We suggest a three step climate change analysis process:

1. Literature review on climate change effects in project area.
2. Analyze/disclose GHG emissions of proposed action - direct and indirect effects.
3. Analyze/disclose climate change effects on proposed action.
Also for your information, on July 11, 2008 EPA published an Advanced Notice of Proposed Rulemaking to solicit public comment on climate change and the regulation of greenhouse gases under the Clean Air Act, (see http://www.epa.gov/climatechange/anpr.html).

**Historic/Cultural Resources**

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, requires that federal agencies consider the effects of a federal undertaking on historic properties and determine whether the undertaking has the potential to affect historic properties. Historic properties include the archaeological, paleontological, native religious and other cultural resources in an area. If there is a potential to affect historic properties from this project, the Bureau of Reclamation and Corps of Engineers should coordinate and consult with the State Historic Preservation Officers and other appropriate entities. The EIS should identify historical, archaeological, paleontological, native religious, sacred or other cultural resources that may be affected by dam modification. Knowledge of the presence or absence of significant cultural resources in the project area and along alternative sites may be important for a reasoned choice among alternatives. All possible efforts should be made to avoid impacts to significant historic and cultural resources.

**Socioeconomic and Community Impacts**

The EIS should also discuss the social and economic consequences of proposed dam modifications, including effects on the local economy, agriculture, recreation, etc. Economic and social impacts should be quantified if possible or otherwise presented, and compared to the environmental impacts to the degree possible. If proposed activities and alternatives would result in increased or decreased public use in particular areas and upon particular resources, the EIS should specifically describe the anticipated effects on specific areas and resources. A summary table, or other visual information, can be provided to reasonably compare the overall benefits and costs associated with the preferred and possibly other alternatives, to understand the quality and type of analysis actually completed.
U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly).

Name            Mike Carlson
Organization and Address        11d 1st St.  
                                      Glendive MT.
Phone (406) 337-2174 FAX               E-mail mcarlson2@mlive.com

Comments:

I would like to recommend a 3rd alternative to the 2 proposed ones.

The 2 proposed ideas are very expensive to build and maintain and unproven in this unique situation.

A much better alternative and much cheaper is to install a fish screen & return route farther down the canal. At the 6 mile distance is an existing canal "spill" for overflow with headgate control of drop structure. A self propelled screen with a debris cleaner could be used & fish & extra water would go back to the River via an existing ditch. This could also be done at the 7 mile site at the Burns Creek siphon of the same principle used. (Continued on next page)

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@gs.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name ____________________________________________________________

Organization and Address ___________________________________________

__________________________________________________________________

Phone ( ) FAX _________ E-mail ________________________________

Comments: I am not convinced the Canal is a killing field for all fish that do enter the Canal. Some swim back out of the Canal. Others get back to the river in the fall when the Canal is drained. In many foreign countries in the Far East, canals are used to grow fish for food. I would like to see a better study by a 3rd party (Non-govt.) of the fish in the Canal, how many, if what happens to them. The Intake Diversion Dam may result in some fish loss but populations/numbers are directly related to water quantity, quality and habitat in the Yellowstone River.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@gs.usbr.gov. Thank you.

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As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)

Name  Mike Carlson

Organization and Address  112 1st Street
                        Glendive, MT, 59330

Phone  (406) 532-2127  FAX  E-mail  mcarlson@milview.com

Comments: Comment on Fish Passage Alternatives

[1] Passage around existing diversion dam.

This alternative will enlarge the existing channel (the "Slough") — an old channel that runs in high water east of the Y. River. This may be one of the better alternatives to use as a bypass channel. It will involve a lot of excavation. It now runs water during high water conditions of flooding during ice jams. Paddlefish and other species do move this way upstream. A small bridge will be needed over the expanded side channel to get sportsmen/fishermen across. There is a need for a bridge/crossing here now on this channel.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@gs.usbr.gov. Thank you.

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As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of 
Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. 
Comments should be postmarked by November 14, 2008.

(Please Print Clearly)
Name  Mike Carlson
Organization and Address  112 1st St. 
Glasde Mt.  59330

Phone  406377-2124 FAX  E-mail  mcarlson@midview.com

Comments:  Comment on Fish Passage alternatives
(2) Relocate Diversion Dam and Canal Headworks upstream.

I am opposed to this alternative for numerous reasons. Existing site was well thought 
out by engineers 100 + years ago for many good reasons.
(a) The proposed upstream site is more prone to ice 
jams.  (b) It would cost a fortune to build here.
(c) It would cross a very historically significant 
area - 13 mile Creek bottom - trading post, steamboat 
landing, indian encampment.
(d) Huge amount of deep canal excavation & costs!
(e) Interference with existing railroad line.
(f) It would cross developed irrigated land & water system.
(g) Costs of going over or under 13 mile Creek which is a 
huge drainage area.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your 
comments to IBR6MTADLWRYELL@gs.usbr.gov. Thank you.

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from public release. Those requests will be honored to the extent permissible by law.
(Please Print Clearly)

Name: Mike Caulson
Organization and Address: 121 1st St.
Glendive, MT 59330
Phone: (406) 377-2149 FAX E-mail: mcaulson@emuland.com

Comments: 

#3 Remove Dam & construct Pumping Plants.
I am opposed to this alternative due the high cost of maintenance of water pumping units. This will add cost for irrigators. The existing direct diversion of water by gravity is very efficient. Over time, this has been a lower cost to farmers than the expense of pumping.
Also, the removal of this dam would dramatically reduce the paddlefish harvest there. This would reduce # of fishermen and their positive impact to our small economy. It would affect the Yellowstone Cavair Grant Program.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@usbr.gov. Thank you.

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(Please Print Clearly)

Name Mike Carlson

Organization and Address 112 1st St.
                           Glendive MT

Phone (406) 327-2178    FAX    E-mail mcoulson@midriver.com

Comments:

Comments on Fish Passage Alternative

# 4) Rock Ramp on River

Does this alternative include removal of existing low dam? If it does, I am opposed to it. This alternative would make it impossible to boat across the Y. River or the existing boat ramp unusable.

Also how would this affect fishing especially paddle fishing? Where would the rock come from? It's cost? Would the boat ramp or camp ground be relocated north?

Also the river bottom below the dam is full of lead weights & sinkers.

This alternative needs more clarification.

*Attach additional sheets if necessary

How would Ice Jamb affect this?

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYEELL@gp.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
To Whom it May Concern,

Our family farm at Crane was left to my brother, my two sisters and myself a few years ago when our parents passed away. We have been leasing it out to neighbors who try to make a living farming the land. It is a small 200 acre irrigated farm. We barely make enough profit to pay the taxes and the water bill currently. If the cost of water were to go up we would be out of business.

Please do not put in a system that is going to raise the cost of our water. Thank you,

--

Gordon Myron
303-886-5933 cell
From: Don Helm <dex113@rocketmail.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 11/21/2008 5:23:33 PM
Subject: intake diversion dam

I am a lifelong resident and irrigation farmer (retired) in the lower Yellowstone valley. The rock dam has served us well for many many years with no apparent harm to the fish. I think this supposed concern is akin to the "global warming" hoax. In a time of economic chaos, spending a million or more dollars on a "political correctness" project such as this borders on lunacy.

Take care of people--eat fish. Don Helm, Fairview MT
From: "Charles Lowman" <clowman@midrivers.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 11/22/2008 4:36:25 PM
Subject: lower Yellowstone River fish passage at Intake

To: Paula Holwegner

Bureau of Reclamation, Montana Area Office
P.O. Box 30137
Billings, MT 59107

From: Charles H. Lowman

12749 County Road 352
Sidney, MT 59270

Re: Fish Passage on lower Yellowstone River at Intake Diversion Dam

Dear Ms. Holwegner,

As a land owner, farm operator, and agriculture lender in the Sidney, Montana area I have two main concerns and requests in any proposal to change the Intake Diversion Dam structure to make passageway for certain fish up the Yellowstone River:

1: Do not restrict or reduce the water flow to the Lower Yellowstone Irrigation Project canal.

2: Do not pass the cost of change on to the land owners and users of the Lower Yellowstone Irrigation Project either directly or indirectly.

Thanks for your consideration.
From: "Harold Schlothauer" <hdfarms@gmail.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 11/22/2008 7:16:37 PM
Subject: Intake dam

I am a land owner along the Yellowstone and a irrigator in the Lower Yellowstone project. I think if you have to do anything with the dam it should be the gradual rock ramp. Pumping is crazy! I also don't think the screen is necessary. We see very few game fish in the irrigation ditches. The screens they are talking about would be very costly and high maintenance.

How come in every thing I read no one talks about Garrison Dam's lake being at fault for the sturgeon not having enough river to drift in. I don't think it is all the diversion dam's problem.

Why not hatch the sturgeon in the nursery and put them above the dam. Way more cost effective.

Thank You,
Harold Schlothauer
From: "Jim Myron" <Jim.Myron@pgs.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 11/23/2008 4:27:07 PM
Subject: Opposited/NO to Intake Dam modification

USBR,

I have an irrigated farm near Sidney, MT under USBR's Lower Yellowstone Irrigation Project. I am NOT in favor of Dam modifications that are proposed for fish benefits. Us farmers will end up paying the bill – I pay enough water taxes now! This country has enough important problems to solve making up new ones – This is a poor use of taxpayer money. My vote is NO on Intake Dam modifications. The dam at Intake has worked perfectly for decades and USBR should leave it alone.

Thanks and best regards, Jim Myron

This email and any files contained therein is confidential and may contain privileged information. If you are not the named addressee(s) or you have otherwise received this in error, you should not distribute or copy this e-mail or use any of its content for any purpose. Please notify the sender immediately by e-mail if you have received this e-mail in error and delete it from your system.
From: "Duane Reynolds" <reynhome@midrivers.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 11/24/2008 8:12:41 PM
Subject: improved fish passage on the Yellowstone

I personally think this would be a complete waste of my tax money to try to save the pallid sturgeon. If the fish is going to die out anyhow in the next 30 or so years, aren't we just trying to postpone the inevitable? If the modifications to the Intake structure had some benefits to the irrigation system, then I would be all for it. It just seems like a lot of money to spend for no payback.
We wish to express our concerns over the Intake Dam project. One of your considerations was to move it upstream---that would do away with our Pivot irrigation water, which we have put a lot of money into to have. We hope you will not do such a thing. Also other neighbors also have the same concerns. This would also interfere with the Paddle Fish industry--which is very important to the community. We would greatly hope that you would very much consider Mike Carlson's proposal. He is very informed and intelligent in what he proposes. Please consider it in depth. All the plans that you showed at the meeting were very expensive! Where does that money come from--in the end? Is it ultimately from the tax payers?!! We are over taxed as it is. With the economy being such as it is, I think our country is in plenty of trouble without spending MILLIONS on a project that is not as important as the survival of America. Thank you.

Everett & Viola Mitchell As for the fish getting into the Canal at the present conditions--doesn't that water go back into the River? Would they not then be back in a safe environment?
Paula Holwegner
Bureau of Reclamation=MT Area Off.
PO Box 30137
Billings MT 59107
Nov. 24, 2008

Dear Ms Holwegner,

We wish to express our concerns over the Intake Dam project. One of your considerations was to move it upstream—that would do away with our Pivot irrigation water, which we have put a lot of money into to have. We hope you will not do such a thing. Also other neighbors also have the same concerns.

This would also interfere with the Paddle Fish industry—which is very important to the community.

We would greatly hope that you would very much consider Mike Carlson's proposal. He is very informed and intelligent in what he proposes. Please consider it in depth.

All the plans that you showed at the meeting were very expensive! Where does that money come from— in the end? Is it ultimately from the tax payers?!! We are over taxed as it is. With the economy being such as it is, I think our country is in plenty of trouble without spending MILLIONS on a project that is not as important as the survival of America.

Thank you.

Everett & Viola Mitchell
PO Box 388
Glendive MT 59330
I'm for a little protection for fish, but what is really more important?, feeding our nation, keeping the lower Yellowstone valley agriculture profitable, or keeping a fish alive ?.

If the environmentalists want the fish, let them pay for protecting them.

Don't make the farmers go broke, or dry up the canal system.

What about Fort Peck Dam, there are pallid sturgeon in the Missouri.

I'm against any major expenditures.
Dear Sir,

I am writing in regard to the fish passage at Intake on the Yellowstone River. I don't think it's necessary to protect certain fish. We need the irrigation water at our residence south of Sidney. It is a big responsibility and the Bureau of Reclamation should not have to pay for this or maintain the upkeep of it. Thank you for giving us a chance to comment on this issue. Sincerely,

Harold and Elaine Emily

466-488-1149
From: rex niles <rexniles@hotmail.com>
To: lbr6mtadlwryell@gp.usbr.gov
Date: 12/3/2008 5:10:15 PM
Subject: FW: Intake diversion dam

Hello, my name is Rex Niles, I live north of Fairview Montana at the northern end of the irrigation project, we are one of the last farms on the project. The value of our land would go down by approx $2000 per acre if we lost the irrigation project. It would effectively put us out of business. It would also put a hardship on the local communities. The diversion dam and canal have been there for a long time. We used to have a lot of fish in the ditches when I was a kid in the late 50's early 60's but when they put the screens on it seemed to solve the problem and we hardly see any type of fish anymore in the ditches. I think there should be a way to build the diversion dam so that it will work for the irrigators and allow the fish to move up and down the river. I wonder if it is the diversion dam that is the problem, or it is just another sign of our changing world. Nothing seems to be as good as it was. When I was a kid in the area, hunting and fishing was great. There used to be a lot of wildlife around. It's getting to be less and less. Thank You Rex A. Niles 3761 hwy 58 Fairview Mt 59221

Suspicious message? There's an alert for that. Get your Hotmail® account now.

Send e-mail faster without improving your typing skills.
I find it hard to believe that our society has come to this. How can pumping be considered when all we have heard for the past years is energy conservation. I'm not going to go into each one of the proposals. I have used this project for the past 30 years and the number of fish that actually become trapped and die is very minute. If a more gradual ramp has to be built for the fish to swim upstream so be it. I do not wish to accelerate any species extinction, but species were going extinct before man walked on this earth and will after our species is gone. Use some common sense when making these decisions, Please.

Thanks,

Dirk Schlothauer

Fairview, MT

Send e-mail anywhere. No map, no compass.
Dear Sirs;

In regard to the different proposals on the Intake Dam:

The Lower Yellowstone Irrigation Project has the least costly and most efficient way to supply water to its users there is. With the efficient management we have the project is being improved every year.

None of the proposals do anything to improve the project. They only possibly protect the wild pallid sturgeon at a cost of millions to our government and water users. This would be unnecessary spending at a time our country is in recession. Let's live with some tame pallids and save some money.

I'm also against any pumping proposal as it would greatly increase the cost to the growers.

Yours Truly,

[Signature]

Past Director of L YIP Water Users

P.S. Who we really need two species of Sturgeon who are almost identical??
Bureau of Reclamation
Montana Area Office
PO Box 30137
Billings, MT 59102

Dec 2, 2008

USBR,

I have an irrigated farm at Crane, MT under USBR’s Lower Yellowstone Irrigation Project. I am NOT in favor of intake dam modifications that are proposed for fish benefits. My vote is NO on intake dam modifications. The dam at intake, MT has worked fine for decades and USBR should leave it alone.

Respectfully,

Cheryl Murphy
406-853-7629
Intake Dam Issue

Comments: Modify the Dam; Improve fish passage; Endangered sturgeon & other native fish

For 100 years we have lived and worked along the Yellowstone River. These fish are still around! We won't eat them, will you? Why now is there a problem with them? Someone can't possibly count how many fish there are in the river let alone say they are endangered! Why now is the canal a problem? Because someone has too much money to use to find fault with something that has not been a problem in 100 years!

Please leave well enough alone!

We have been working the land with water from the Intake Dam for 38 years, our father for his entire life (86 years). My husband for 57 years!

If you have so much money to use (not ours), please look towards improving roads and bridges!! We farm so you can eat well!

Please drop all proposals!

Thank you,

Dennis & Karen Schmierer
Savage, MT
As part of the public scoping process, comments should be sent to Paula Holwegner, Bureau of Reclamation, Montana Area Office, P.O. Box 30137, Billings, MT, 59107. Comments should be postmarked by November 14, 2008.

(Please Print Clearly)
Name ALBERT GROSKINSKY
Organization and Address 34851 County Rd 120 E
Sidney, MT 59270

Phone (40) 487-7594 FAX E-mail

Comments: I do not like the fact that the government can pass a law and not fund it. The operating and maintenance cost of the project falls on the irrigated landowners when all the people of the U.S. benefit from the natural resource.

*Attach additional sheets if necessary

Please mail your comments to the address on the back of this form, or FAX your comments to 406.247.7338, or e-mail your comments to IBR6MTADLWRYELL@gp.usbr.gov. Thank you.

The names and comments of those making written or oral statements on this process will become part of a public record. You may request that your name and/or address be withheld from public release. Those requests will be honored to the extent permissible by law.
December 5, 2008

Bureau of Reclamation Montana Area Office
Box 30137
Billings, MT 59107

Subject: Intake Diversion Dam

I am writing this letter to inform whoever that is in favor of altering the dam is acting on their irrational emotions based on one-sided testimony.

I am an avid fisherman and in 38 years of fishing and catching thousands of other fish including much shovelnose sturgeon neither I nor anyone else that I know have ever caught a pallid sturgeon either. So even if they do go extinct, 99% of the people will never know other than a few Fish and Game biologists.

I have many questions about data that Fish and Game have collected and based their evidence on.

- Fish and Game can not prove that the dam is what is putting the pallid sturgeon at risk.

- Other species of fish can and do cross the dam for whatever purpose they desire, so why can’t the pallid sturgeon.

- Fish that do enter the canal provide good fishing / recreation opportunities for the entire length of the canal, plus all the spillways along the way including the canal itself that allows for fish to reenter the Yellowstone River.

- The Yellowstone River already has another natural passage around the dam via the slough around Joe’s island.

- Why not try releasing more water out of Ft. Peck dam to duplicate natural spring runoff flows on the Missouri River to encourage spawning? No expense to anyone and will even create some electricity. Forget about the Mississippi River’s barges.

- Who is going to fund this project, and how much will it cost? The Yellowstone River and mother nature are unmanageable. The initial cost will be enormous but maintenance and future costs will also be huge and unpredictable.

Is a handful of pallid sturgeon worth the millions of dollars that is going to be placed on the farmers taxes of the lower Yellowstone Irrigation Project?

If a few green conservationists with no common sense want all these radical ideas, studies and projects done, then they should find their own funding.

Leave the dam alone and quite wasting my tax dollars on senseless studies.

Troy Hafele
Our thoughts concerning the proposed fish passage 'improvements' at Intake Diversion Dam are that things should be left alone, and to keep the dam 'as is'. This diversion dam has worked well for entire time it has been in existence and we don't see any need to meddle with trying to improve something that does not need 'improving'.

Leave it alone and let it continue to do the job it has been doing....

Adeline and Arnold Dige
Sidney, MT
From: "Denise Rambur" <dfr@midrivers.com>
To: <IBR6MTADLWRYELL@gp.usbr.gov>
Date: 12/10/2008 9:30:28 PM
Subject: Intake Diversion Dam

In response to comments on the Intake Diversion Dam.

Normally I do not respond to these request because normally people in charge do what they want, not what the people affected by the project want.

First take a look at our economy and the effect, it is having on the nation. This did not just happen the past few years, it has been put in place by the last 30 years of bureaucrat programs like this that waste taxpayers money to save the earth. To save a spices that no one ever sees or can eat. You will put in jeopardy the livelihood of 1000's of people on a project that is absurd. People that produce and generate a product to the benefit to this country, have to deal with these projects that make our expenses higher until we can not compete in the world market. Let our food supply be determined by foreign countries like we let oil, steel and lumber industries. You saw oil get high just wait until we have a hungry nation.

This dam has history of being built by blood sweat and commonsense engineering. Engineers today could not build a project like this without pumps, lifts ect. and it probably would not work.

If the people in charge of this project truly beleive in it all they have to do is what I do every time I go to the bank, sign a personal guarantee that when our water is affected and our crops fail, things do not work like planned and the pallid sturgeon will do what they have done in the past years. They are on the line with their personal income in jeopardy, very few of the people in charge will take this step.

This project has been working 100 years and believe it or not there still are fish in the river and will be in future years. The waste of tax payers money on thinking up these projects is shameful.

Rambur Charolais LTD.
Howard Rambur
December 15, 2008

Ms. Paula Holwegner
Bureau of Reclamation
Montana Area Office
P.O. Box 30137
Billings, Montana 59107

Dear Ms. Holwegner:

The staff of Lewis and Clark National Historic Trail has reviewed the Notice of Intent to Prepare an Environmental Impact Statement (EIS) for the Intake Diversion Dam Modification, Lower Yellowstone Project, Montana. Please accept the following comments for use in developing the draft EIS for this project.

Lewis and Clark National Historic Trail (the Trail) was established by Congress in 1978 and is defined as a trail following the outbound and inbound routes of the Lewis and Clark Expedition. The Trail is administered by the National Park Service and is charged with protecting the resources and historic scene encountered by the Corps of Discovery for public use and enjoyment. The Lower Yellowstone Project includes landscapes through which the Corps of Discovery traveled. On the Expedition’s return to the east in 1806, Captain William Clark led a small party of men and horses over Bozeman Pass in Montana. The company prepared dugout canoes and returned to river travel near Park City, Montana. They followed the Yellowstone River to its confluence with the Missouri River, passing the current location of the Intake Diversion Dam on August 1, 1806, camping about seven miles downstream that evening.

The NPS supports the effort to improve passage and reduce entrainment for the endangered pallid sturgeon and other native fish in the lower Yellowstone River. The proposed modification of the Intake Diversion Dam should return the river channel to a pre-dam state. This goal should be realized with the least possible ground disturbance and stream alteration. Restoring the conditions and processes that existed on the Yellowstone River prior to it being dammed will benefit the pallid sturgeon and the overall health of the river ecosystem.

Potential impacts to the natural, cultural and recreational resources of the Trail should be considered in the development of the EIS for this project. The NPS supports return of
natural river processes while minimizing impacts to the landscape and retaining/enhancing recreational access and use of the river.

The NPS recommends evaluation of future energy needs for water intake and maintenance in the EIS. Alternatives that require the purchase of considerable electrical power could result in other undesirable conditions, such as increased CO₂ emissions from generation facilities.

The potential effects of global climate change on the proposed project should be evaluated in the EIS. As reported by the Intergovernmental Panel on Climate Change (2008), impacts of global climate change are likely to occur by the middle of the 21st century, within the lifetime of this project. Global climate models predict that the western United States will likely experience higher temperatures and reduced stream runoff. Under such conditions, water flow in the Yellowstone River may become insufficient to meet both irrigation demands and riverine habitat needs. The NPS recommends that minimum in-stream flows below the Intake Diversion Dam be established as part of this planning effort to sustain ecosystem processes.

The NPS appreciates the opportunity to comment and provide input into the development of the EIS for this project. We look forward to reviewing the draft EIS when it becomes available. If you have questions regarding our comments, please contact Chief of Resources Dan Wiley at 401-661-1830 or Dan_Wiley@nps.gov.

Sincerely,

/s/ Stephen E. Adams
Superintendent

cc: Ms. Roxanne Runkel
Planning & Environmental Quality
National Park Service
Intermountain Regional Office
12795 West Alameda Parkway
Lakewood, Colorado 80228-2822
Lambert

59243

12-08

Mrs. Paula Wolweger:

Writing concerning the proposed plan to change the lower Yellowstone Irrigation Dam constructed about 15 miles N. of Enidine so as to provide the pallid sturgeon access to points west for spawning. Not too many years ago in either Oregon or Washington an irrigation project was pretty much shut down to preserve the "BARTER STAIR"—then thought to be going extinct. (In later years this species of snail were found elsewhere) I think provisions can be made for the sturgeon without spending 30 million dollars that we as a nation are in dire need of providing for education and other needs for the many other needs of people in our nation plus in the world. (Father helped in the construction of the L.Y.I. Project in the early 1900s) Respectfully, William Bourbon.
This letter is in response to the agencies concerned with the Intake Dam. I have fished in the Yellowstone River and the Missouri, between Miles City and the Confluence for fifty years. In that time the water quality and amount of fish has gone up more and more every year. Intake Dam and Canal don’t hurt the fish one bit. The fish go right over the dam and at high water the fish go around the dam to the east of the island created by high water. The big problem with the Sturgeon are biologist in the spring trap the females at the confluence and take all the eggs, therefore stopping the natural reproduction. If they are so concerned about the fish in the Canal, have all these biologists put fish traps in the Canal and empty them back into the river, therefore giving them something to do all summer. I feel that there is no expert evidence that the canal or the dam have anything to do with conditions or situations concerning the fish. Leave the dam alone and let the fish do what’s necessary.

James P. Melby
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FAXOGRAM

Date: December 10, 2008

To: USBR
Attention: Paula Holwegner
Fax: 406-247-7338
Email: 
From: Jerry Nypen, LYIP

No. Pages: 3

Subject: Intake Dam fish protection comment

Paula, Darrell G. Hystad presented this proposal to one of our board members. We are forwarding it to you.

Jerry Nypen, Manager
Lower Yellowstone Irrigation Project Board of Control
November 10, 2008

Intake diversion Proposal:

This proposal incorporates existing natural features, existing facilities and improvements using natural water flow to alleviate restrictions to the pallid Sturgeon during spawning season.

It is proposed to retain 2/3 of the existing rock diversion, the campground and the boat ramp. There would be a taller, approximately 10 to 12 feet higher than the existing rocks, rock divider at a right angle to the existing dam 450 to 500 feet from the existing canal inlet. This rock wall would be 30 to 50 feet wide and would extend upstream from the existing dam 500 to 700 feet. At the upper end of the rock wall would be the high point of a rock ramp extending downstream incorporating the existing gravel bar to a point approximately 1500 feet from its starting point above the diversion dam. The high point in the rock ramp would be at the same elevation as the existing rocks to maintain even flow through the ramp. It would also allow ample water to spill over the existing diversion to reduce water velocity to a rate acceptable for spawning Pallids to navigate. This diversion would have a balanced effect on the Paddlefish harvest by allowing the harvest of fish to continue in the rock ramp and rapids area, and allowing the paddlefish easier upstream access thus reducing the bunching effect and extending the season to provide for more fishing opportunities and a more balanced harvest.

This plan also involves using a rotating drum type fish screen upstream from the existing water inlet to the canal to keep fish from entering the canal system. Under this proposal the existing inlet would be left intact with the gates remaining closed. By leaving this in place if there should be water distribution problems in the late summer there would be the possibility of opening these gates for water flow without having a detrimental effect on fish populations for the short time they would be used.

As a member of the community and a member of the caviar committee, I am sincerely concerned with the future of the Pallid Sturgeon and the paddlefish populations. I would appreciate careful consideration of this plan because I feel it would be more readily accepted by the Irrigation district, landowners, and sportsman while still accomplishing the goals set forth by the ESA. I also feel that by using the natural flow of the river it would be less invasive and easier to maintain than other proposed plans.

For you consideration,
Darrell G. Hystad
Bureau of Reclamation  
Montana Area Office  
PO Box 30137  
Billings, MT 59107

Dear Bureau of Reclamation,

Concern has been expressed in regards to the Intake Dam. Early research that I have conducted indicates that the best option at this point is to leave the Intake Dam alone. Any and all proposals to modify the dam should be dropped.

I am interested in attending your next meeting where this issue will be discussed. It is my hope that I can network, research, and help with the problem solving. I was raised in this region and have an extensive background which would be beneficial to the Bureau. Please contact me at 406-773-5074.

Sincerely,

Raedean Haupel