

**APPENDIX B**  
**BIOLOGICAL BACKGROUND INFORMATION**

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September 5, 1997

Mr. Larry Cieslik  
Reservoir Control Center  
Missouri River Division  
Corps of Engineers  
12565 West Center Road  
Omaha, NE 68144-3869

Dear <sup>Larry</sup> Mr. Cieslik:

On behalf of the Missouri River Natural Resources Committee (MRNRC), I would like to welcome you to your new position as Chief of the Reservoir Control Center. We have enjoyed working with you on the Missouri River Master Manual and expect to continue making positive strides with you and your staff in addressing a myriad of complex issues facing the Missouri River system.

The following are recommendations of the MRNRC for operation of the Missouri River system during the 1998 water year. These recommendations were adopted by the MRNRC during our annual summer meeting held in Bismarck.

- 1) We continue to endorse an emphasis on physical habitat modification as an interim measure for terns, plovers and native fish. We encourage the Corps to pursue these habitat enhancement projects throughout the system. Also, we continue to support efforts by the Corps to evaluate changes in habitat availability within and between years throughout the system. (Note: The MRNRC will be proposing a new approach to address tern and plover conservation needs to the Deputy Commander by separate letter. The Deputy Commander should receive this letter shortly).

- We continue to encourage the Corps to monitor the extent of any flooding or habitat changes associated with high flows during this record-setting water year of run-off. We suggest the use of videography to document flooding and habitat changes. This will prove to be very valuable as discussions on these subjects continue.
- The date that summer flows are returned to full navigation support levels should remain flexible. The actual date should be based on the status of fledgling terns and plovers.
- We are aware of the positive impacts high flows have had on tern and plover habitat the past few years. The high flows have formed sandbar habitats at a much higher elevation than a few years ago. These "new" sandbars should eventually provide nesting and brood habitat for least terns and piping plovers. In addition, there appears to have been better recruitment of native fish during recent years of higher flows. Relatively high spring-early summer flows coupled with lower mid to late summer releases would be helpful for the above species. Regardless of the magnitude of flows adopted in next years Annual Operation Plan, every effort should be made to eliminate any increases in discharge during the tern/plover nesting season. A flow scenario (based on inflow conditions equal to or less than upper quartile) as proposed last year below Garrison Dam was a good first step. Spiking of water releases should also be eliminated.
- High reservoir levels the past few years have inundated vast expanses of vegetation, which in turn, has provided tremendous spawning and rearing habitat for numerous fish species. Most of this vegetation grew during the 1987-92 drought as the reservoirs receded. However, because of the record or near record elevations of these reservoirs the past few years there is again a need to allow for revegetation of some of the shorelines. The MRNRC has promoted the concept of unbalancing Fort Peck, Lake Sakakawea and/or Lake Oahe to maximize fish production in past years; however, other than slight adjustments made for Fort Peck (as proposed below) there is a need to create habitat (i.e. terrestrial vegetation) in all three reservoirs. For this reason, we recommend storage in these reservoirs be relatively balanced for the 1998 water year.
- For runoff projections between median and the upper quartile, operations for Fort Peck should be as follows: between May 15 and June 15 releases from Fort Peck should be 25 kfs with approximately 50% of these flows originating through the traditional power plant and the remaining 50% from the Spillway. The purpose for this release is two-fold. First, field personnel will monitor movements of native fish in relationship to flows. Secondly, habitat changes due to a month of relatively high flows will be documented. Further justification and reasoning for this release scenario was established last year by the Montana-North Dakota pallid sturgeon work group (refer to Chris Hunter to Col. Richard Craig letter dated February 13, 1997).
- Minimum flow releases should be maintained below all dams to maintain a wetted perimeter necessary to sustain fish populations. These recommendations will be examined and refined on a case by case basis as new data becomes available. Specifically, we recommend the following minimum instantaneous flows;

Fort Peck	4 kcfs
Fort Randall	15-20 kcfs
Gavins Point	9 kcfs
All Others	7.5 kcfs

Last year we requested a written response from the Corps outlining which of our Annual Operating Plan recommendations were implemented, which were not and why. This request was an effort for us to effectively evaluate our recommendations. I understand internal matters such as regional reorganization and appointing a permanent Reservoir Control Chief were issues that received the highest attention during the past year and may be the reason as to why we did not receive a formal response from the Corps. Once again it would greatly assist our efforts if you could provide the following:

- A letter identifying which recommendations were included in the final Annual Operating Plan prior to our Spring meeting. This meeting is typically held in late February or March.
- A letter evaluating implementation of these recommendations prior to our annual meeting. Our annual meeting is usually held in July or August.

On behalf of the MRNRC, I want to again congratulate you and wish you the best of luck as the Chief of Reservoir Control. We would also like to thank all of the Corps staff who have participated at past MRNRC meetings and their efforts to keep us informed of the ongoing operational status of the Missouri River system. If you have any questions concerning these recommendations, please contact me or any other member of the MRNRC.

Sincerely,



Greg Power  
 Outgoing Chair  
 Missouri River Natural Resources Committee

- c.f. MRNRC representatives and chairperson  
 MRNRC ex-officio members  
 MRBA executive director

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1434 316th Lane • Missouri Valley, Iowa 51555 • 712-642-4121 • Fax 712-642-2460

September 1, 2000

Colonel Michael Meuleners  
Northwestern Division, Corps of Engineers  
12565 W. Center Road  
Omaha, NE 68144-3869

Dear Colonel Meuleners:

I am pleased to submit the following recommendations of the Missouri River Natural Resources Committee (MRNRC) for operation of the Missouri River system during 2000/2001. These recommendations were developed with input from our Fish, Wildlife, and Tern and Plover Technical Sections and adopted by our official MRNRC state delegates.

For the past several years the MRNRC has provided comprehensive recommendations regarding seasonal dam releases, reservoir elevations, and operations for interior least terns and piping plovers. The recommendations regarding Fort Peck and Gavins Point Dam releases, minimum flows below the dams, minimum lake elevations in Lake Sakakawea and Lake Oahe, stable discharges below Oahe Dam and Fort Randall Dam, and spiking of water releases and operations for interior least terns and piping plovers cited in our August 26, 1999 letter remain valid and are incorporated herein by reference.

We appreciate the efforts made this year to maintain Lake Sakakawea elevations during rainbow smelt spawning and to maintain more stable discharges from Oahe Dam during walleye spawning. Biologists have already detected substantial numbers of young-of-the-year (YOY) smelt in Lake Sakakawea while low numbers were found in Lake Oahe. The remainder of this letter will concentrate on specific recommendations for the 2000/2001 AOP which pertain to test flows from Fort Peck Dam and unbalancing of storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe.

It is our understanding that beginning in mid-May 2001, test flows ("the mini-test") will be released through the Fort Peck Dam spillway to test the structural integrity and performance of the spillway. Various combinations of flow from the spillway and powerhouse will be tested up to a maximum combined release of 15,000 cubic-feet-per-second. These combinations will be tested over a 3-4 day period followed by several days of monitoring prior to another test. The testing is to be completed in 25 days. In 2002, larger test flows will be released and accompanied by an unbalancing of storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe.

The MRNRC supports these preliminary tests as we view them as initial steps in adaptive management of the river. Spring releases from the dams and unbalancing of reservoir storage should be decided annually, and be dependent on storage conditions in the reservoirs and projected basin runoff. In anticipation of the 2002 full Fort Peck test and reservoir unbalancing, MRNRC members are developing elevation triggers and runoff guidelines for Fort Peck Lake, Lake Sakakawea, and Lake Oahe to guide future release and unbalancing efforts. We intend to discuss these guidelines with your staff and the U.S. Fish and Wildlife Service during our annual meeting in September.

Our specific recommendations for 2001 are:

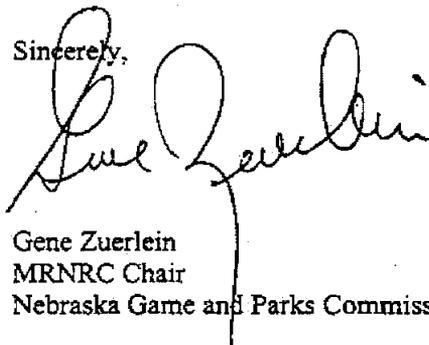
**Exhibit 1**

MRNRC State Agency Membership: Montana Department of Fish, Wildlife, and Parks • North Dakota Game and Fish Department • South Dakota Department of Game, Fish, and Parks  
Nebraska Game and Parks Commission • Iowa Department of Natural Resources • Kansas Department of Wildlife and Parks • Missouri Department of Conservation

- Owing to the current low storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe, storage should be balanced ;
- Minimum storage in all lakes should be maintained as close as possible to the conservation pool (base of the annual flood control pool);
- Lake Oahe elevations should not fall between April 8 and May 15 for smelt and walleye spawning; levels in Lake Sakakawea should not fall between April 20 and May 20. Smelt spawn in the top six inches to one foot of the water column on reservoir shorelines. Lake Oahe levels dropped approximately one foot this year immediately after the smelt spawned. Stable reservoir levels are necessary during and immediately following spawning to prevent dessication and loss of eggs. Because of its current low smelt numbers, Lake Oahe is the priority for the coming spring and the following spring if this recommendation cannot be implemented in both lakes.
- It is our understanding that the Fort Peck mini-test will not be implemented unless reservoir elevations exceed 2225 and runoff is expected to be above lower quartile. Stable to rising lake levels should be maintained during the test to preserve reservoir fish spawning and nursery habitat. The tests should be delayed until early June. This will make it more likely that inflows would match or exceed the test outflows even during a low runoff year, thus preserving lake levels. Also, in May, reservoir surface temperatures are not likely to be high enough to produce the desired downstream temperature increases from spillway releases.
- Preliminary reports are that interior least terns and piping plovers had a successful nesting year owing to the continued availability of habitat created by the high flows in 1997 and the lower flows that occurred throughout the nesting season. However, vegetation is beginning to significantly encroach on nesting bars, especially in the river reach between Fort Randall Dam and Lewis and Clark Lake. Flow management measures should be instituted next year if water is available to scour and push up new bars.

I trust these recommendations will be helpful to your staff in developing the Annual Operating Plan for next year. If you have any questions concerning these recommendations, please contact me at 402-471-5555 or Tom Gengerke, incoming MRNRC Chair at 712-336-1714.

Sincerely,



Gene Zuerlein  
MRNRC Chair  
Nebraska Game and Parks Commission

MRNRC Delegates  
MRNRC Ex-Officio Members and  
Cooperating Agencies  
MRNRC Technical Section Chairs  
MRBA Executive Director  
FWS Missouri River Coordinator (Olson)



1434 316th Lane • Missouri Valley, Iowa 51555 • 712-642-4121 • Fax 712-642-2460

September 21, 2000

Colonel Michael Meuleners  
Northwestern Division, Corps of Engineers  
12565 W. Center Road  
Omaha, NE 68144-3869

Dear Colonel Meuleners:

This is a follow-up to our Annual Operating Plan recommendations of September 1, 2000. After the presentation by your staff on September 13 at our annual meeting and follow-up discussion, we have a better understanding of the plans proposed for the Fort Peck test flows and unbalancing of reservoir storage in 2001 and 2002.

The Missouri River Natural Resources Committee has supported the concept of unbalancing for many years, but only under the right circumstances. This past year has been one of below normal runoff in the Upper Basin. Your staff predicts runoff to be approximately 17.1 million acre-feet which is below Lower Quartile (i.e. occurred in 15 years during the 100-year period from 1898 to 1997). The elevations predicted for Fort Peck Lake, Lake Sakakawea, and Lake Oahe under the basic forecast for next March 1 are below normal for that time of year and infrequently occur under current operations. Since 1968 when the reservoir system was completed, these elevations have been exceeded in roughly 4 out of 5 years. **Therefore, we are concerned that the plans proposed for unbalancing in the next several years may further lower already low reservoirs if a prolonged drought ensues.** For this reason, we believe that the conditions for implementing unbalancing need to be specified to minimize unintended impacts to reservoir fisheries in the event the drought persists.

We agreed at the meeting to provide reservoir elevation guidelines for Fort Peck Lake, Lake Sakakawea, and Lake Oahe for implementing unbalancing. The elevation guidelines are as follows:

- 1) **Fort Peck Lake:** If the March 1 elevation is greater than the base of the annual flood control pool (2234 ft. msl), implement unbalancing. If the March 1 elevation is between 2227 and 2234 feet msl, implement unbalancing if runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not cause lake levels to decline during the important spawning period for forage fish which ranges from April 15-May 30.
- 2) **Lake Sakakawea:** If the March 1 elevation is greater than the base of the annual flood control pool (1837.5 feet msl), implement unbalancing. If the March 1 elevation is between 1827 feet msl and 1837.5 feet msl, implement unbalancing if runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not be implemented until after the critical rainbow smelt and walleye spawning period of April 20-May 20.
- 3) **Lake Oahe:** If the March 1 elevation is greater than the base of the annual flood control pool (1607.5 feet msl), implement unbalancing. If the March 1 elevation is between 1600 feet msl and 1607.5 feet msl, implement unbalancing if runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not be implemented until after the critical rainbow smelt and walleye

Exhibit 2

MRNRC State Agency Members: Montana Department of Fish, Wildlife, and Parks • North Dakota Game and Fish Department • South Dakota Department of Game, Fish, and Parks  
Nebraska Game and Parks Commission • Iowa Department of Natural Resources • Kansas Department of Wildlife and Parks • Missouri Department of Conservation

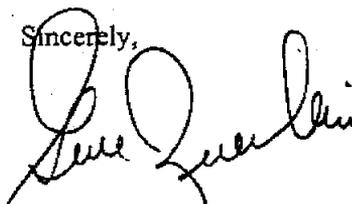
spawning period of April 8-May 15.

Under the criteria listed above, it would have been possible to implement unbalancing in the reservoirs in the majority of years since 1968. Our analysis of actual end-of-month storage data for the reservoirs indicate that unbalancing would have occurred in 24 of 32 years in Oahe, 24 of 32 years in Sakakawea, and 26 years out of 32 in Fort Peck.

Even with these conditions, it will still be possible to implement the Fort Peck test flows over the next several years without unbalancing Lake Sakakawea. If the drought persists, Sakakawea elevations will continue to decline thereby exposing shoreline habitat and allowing regrowth of vegetation already exposed this year.

I hope these guidelines are helpful to your staff in developing the Annual Operating Plan for next year and the plans for the Fort Peck test flows. If you have any questions concerning these recommendations, please contact me at 402-471-5555 or Tom Gengerke, incoming MRNRC Chair at 712-336-1714.

Sincerely,



Gene Zuerlein  
Immediate Past MRNRC Chair  
Nebraska Game and Parks Commission

MRNRC Delegates  
MRNRC Ex-Officio Members and  
Cooperating Agencies  
MRNRC Technical Section Chairs  
MRBA Executive Director  
FWS Missouri River Coordinator (Olson)

BIOLOGICAL OPINION  
ON THE  
OPERATION OF THE MISSOURI RIVER MAIN STEM RESERVOIR SYSTEM,  
OPERATION AND MAINTENANCE OF THE MISSOURI RIVER BANK STABILIZATION  
AND NAVIGATION PROJECT,  
AND  
OPERATION OF THE KANSAS RIVER RESERVOIR SYSTEM

(November 30, 2000)

Prepared by:

U.S. Fish and Wildlife Service  
Region 6, Denver, Colorado  
Region 3, Fort Snelling, Minnesota

## EXECUTIVE SUMMARY

### U.S. FISH AND WILDLIFE SERVICE BIOLOGICAL OPINION ON THE OPERATION OF THE MISSOURI RIVER MAIN STEM RESERVOIR SYSTEM, OPERATION AND MAINTENANCE OF THE MISSOURI RIVER BANK STABILIZATION AND NAVIGATION PROJECT, AND OPERATION OF THE KANSAS RIVER RESERVOIR SYSTEM

The Corps of Engineers provides the primary operational management of the Missouri River and is responsible under the Endangered Species Act to take actions within its authorities to conserve listed species. On April 3, 2000, the Corps asked the Fish and Wildlife Service to formally consult under the Endangered Species Act on the Operations of the Missouri River Main Stem System, and related Operations of the Kansas River Tributary Reservoirs, and the Operations and Maintenance of the Missouri River Bank Stabilization and Navigation Project. The Corps of Engineers prepared biological assessments for each of these projects and determined that their operations may affect listed species. The species covered under this consultation are the endangered pallid sturgeon, the endangered least tern, the threatened piping plover, and the threatened bald eagle. Current river operations on the Missouri and Kansas Rivers, as well as the continued maintenance of the Bank Stabilization and Navigation Project, are expected to perpetuate habitat loss, nest failure, reduction in forage base, reduction of spawning cues, and overall reductions in reproductive success of these species.

The Fish and Wildlife Service has reviewed project plans and determined that the operation of the three Missouri River projects under past and present operating criteria and annual plans have severely altered, and continue to alter under present operating plans, the natural hydrology and the riverine, wetland, and terrestrial flood plain habitats and fish and wildlife resources of the Missouri River and lower Kansas River ecosystems. Current operations, if continued without significant alterations, likely will cause further declines in other native species and likely will result in additional species listed as threatened or endangered. If more Missouri River species are listed in the future, operational conflicts and constraints will increase, while flexibility to manage the system will decrease.

After reviewing the current condition of the bald eagle, least tern, piping plover, and pallid sturgeon, the environmental baseline for the action area, the effects of the Corps' proposed operation of the Missouri River Main Stem Reservoir System, the operation and maintenance of the Bank Stabilization and Navigation Project, and operation of the Kansas River Reservoir System, and the cumulative effects, it is the Fish and Wildlife Service's opinion that the referenced actions, as proposed, are likely to jeopardize the continued existence of the least tern,

piping plover, and pallid sturgeon, but are not likely to jeopardize the continued existence of the bald eagle.

To avoid jeopardizing the continued existence of the tern, plover, and sturgeon, it is necessary to (A) restore a portion of suitable riverine aquatic habitats and hydrologic conditions necessary for successful reproduction and recruitment of the three species, and (B) provide culturing and population augmentation (in the near-term) for the pallid sturgeon to ensure genetic viability of the species until the necessary habitat and hydrologic conditions are restored. To achieve that while continuing Missouri and Kansas River operations and maintenance of the BSNP, it is necessary to: (a) implement flow (i.e., variability, volume, timing, and temperature) enhancement with the goal of providing the hydrologic conditions necessary for species reproduction and recruitment; (b) implement a concurrent habitat restoration program with the goal of restoring habitat quality, quantity, and diversity so that the benefits of adequate dynamic natural river processes are restored; (c) conduct a comprehensive endangered species habitat and monitoring program to better characterize habitat use (by all life stages), longevity, and availability in the Missouri River to facilitate and guide habitat restoration and flow modification; and (d) establish an adaptive management framework to implement, evaluate, and modify the actions in response to variable river conditions, species responses, and increasing knowledge base. The Service believes that those actions will assist in restoring and maintaining the functional ecosystem, and will ensure that the likelihood of survival and recovery of the pallid sturgeon, interior least tern, and the piping plover are not appreciably reduced.

The Service, working with the Corps, has developed a Reasonable and Prudent Alternative (RPA), that includes actions for the least tern, piping plover, and the pallid sturgeon, and the ecosystem in general, that we believe will avoid the likelihood of jeopardizing the continued existence of the three species. This alternative is designed to return some semblance of practical "form and function" of a river system to appropriate sections of the Missouri and Kansas Rivers. It is the combination of all parts of the alternative, working in concert, that will eliminate jeopardy to the species. The primary actions of the RPA include four parts that apply to the least tern, the piping plover, and the pallid sturgeon. A fifth action is designed for the pallid sturgeon. These actions can generally be described as follows:

1. Flow enhancement: The Service has determined that a spring rise and summer drawdown must be implemented from Gavins Point Dam to restore, in part, spawning cues for fish, maintain and develop sandbar habitat for birds and fish, enhance aquatic habitat through connection of the main channel to backwaters and side channels, and improve habitat conditions for summer nesting terns and plovers, forage availability, and fish productivity. A spring release from Fort Peck Dam will provide spawning cues and increase the amount of warm water habitat available to pallid sturgeon and native river fish.
2. Habitat restoration/creation/acquisition: The Service has determined that a portion of the historic habitat base must be restored, enhanced, and conserved in riverine sections that will benefit the listed birds and fish. Habitat restoration goals are 20-30 acres of shallow water

(<5 feet deep, < 2.5 ft/sec. velocity) per mile. Similarly, variable goals by river segment for emergent interchannel sandbar habitat are also identified.

3. Unbalanced system regulation: Unbalancing of the upper three reservoirs when runoff conditions permit, by holding one reservoir low, one at average levels, and one rising on a 3-year rotation will benefit spawning fish and increase forage, increase the availability of tern and plover habitat in reservoirs in drawdown years, create tern and plover sandbar habitat in riverine segments below Fort Peck or Garrison Dams in years of higher releases due to reservoir drawdown, and increase availability of tern and plover sandbar habitat in riverine segments below Fort Peck and Garrison in years of steady or rising reservoir levels.
4. Adaptive Management/Monitoring: The Corps should embrace an adaptive management process that allows efficient modification/implementation of management actions in response to new information and to changing environmental conditions to benefit the species. The two components of this process will be the establishment of an interagency coordination team that will coordinate and guide development and implementation of measures to benefit the species; and development and implementation of a robust monitoring program to better understand baseline conditions, analyze actions, and identify modification to improve results.
5. Propagation/Augmentation: The Corps and the Service will work together to increase pallid sturgeon propagation and augmentation efforts, while habitat and hydrology improvements are being implemented. This short-term action will ensure genetic integrity and prevent extinction of existing pallid sturgeon populations.

Details of the primary actions of the Reasonable and Prudent Alternative described above and the complementary actions are described in the biological opinion text.

and summer flows likely would be reduced to conserve water without implementing special flow modifications. Therefore, the recommended flows from Gavins Point are not expected to contribute to effects of floods during high water years, nor exacerbate drought conditions during low flows. While full implementation of modified flows should occur by 2003, the Corps should move expeditiously to implement components of recommended flows (e.g., spring rise only, summer low flow only, modified rise or low flow) as quickly as possible.

2. In 2001 and 2002, as well as years when the recommended flows are infeasible, the Corps and other agencies in ACT, shall examine expedited implementation of other elements of the RPA to ensure adequate progress towards avoiding jeopardy of the least tern, piping plover, and pallid sturgeon. While in many cases this may involve increasing the pace of alternative methods of habitat creation, such alternatives do not offset the need for hydrologic changes necessary for successful pallid sturgeon spawning, and production of forage for nesting terns and plovers. Therefore, such measures could not be used in-lieu of hydrologic improvements over the long-term.

- B. Fort Peck:** In the 200-mi (322 km) reach of the Missouri River below Ft. Peck (Segment 2), higher spring flows and warmer water temperatures during the open water period are needed to improve environmental conditions for the pallid sturgeon, least tern, and piping plover. The higher and warmer flows will provide the hydrologic cue for pallid sturgeon and other native fish to spawn. The increased water temperature will help normalize the temperature of the river, provide the temperature cue more suitable for pallid sturgeon egg maturation and spawning (as well as spawning of other native fish), and improve recruitment success for these species. The higher flows will restructure the channel and increase/improve the available riverine habitat by partially restoring the environmental conditions that listed species evolved with, by redistributing sand for summer flow sand bars, inundating side-channels, and connecting backwater areas to increase primary production which will, in turn, provide additional nutrients, forage fish, and macroinvertebrates needed for larval fish or terns and plovers production and recruitment.

Criteria for the improved spring flows and warm water releases from Fort Peck have been jointly developed through coordination between the Service, Corps, U.S. Geologic Survey, WAPA, and Montana and North Dakota game and fish departments. Through adaptive management, modifications to these criteria may occur through the ACT.

The higher flows and warm-water releases are needed, on average, once every 3 years (33 percent frequency occurrence) and should be incorporated into the unbalancing strategy for the upper three reservoirs (discussed in Section III which follows). A combined release from the spillway and powerhouse is needed to increase water temperature. To provide adequate head for warm-water release from spillway gates (2225 msl), the minimum elevation of Fort Peck Reservoir should be 2230 msl. The Fort Peck releases should only be conducted in years of sufficient runoff (i.e., Median, Upper Quartile, or Upper Decile years) and be timed to avoid lowering the lake during the forage fish spawn (approximately mid-April to mid-May). Initiation of higher discharge shall emulate the timing of the natural

inflow into the lake and occur 2-3 days after the rising stage at the Landusky, MT, gauge, but not before May 15 because of cold water temperatures. The peak discharge will range between 20 Kcfs and 25 Kcfs (approximately 19 Kcfs from the spillway and 4 Kcfs from the powerhouse) and persist for a minimum of 3 days. Warm-water releases should continue for at least 30 days. The combination of releases from the spillway and powerhouse should be mixed to achieve a minimum target temperature of 64.4° F ( 18° C) at Frazer Rapids (RM 1746).

1. In spring 2001, or the first year reservoir elevation and runoff criteria can be met, the Corps shall implement a "mini-test" out of Fort Peck Reservoir to gain sufficient data on combinations of spillway and powerhouse discharges and water temperatures to develop a model for relationships. The mini-test generally should follow the criteria addressed above for reservoir elevation, runoff year, and initiation, but will last only about 3 weeks as flows are varied from 7 Kcfs to 15 Kcfs as various combinations of spillway and powerhouse releases are monitored.
2. In spring 2002, or the first year following the "mini-test" that reservoir elevation and runoff criteria can be met, the Corp shall implement a "full test" of improved flows and warm-water releases out of Fort Peck Reservoir based on the criteria addressed above or as modified through coordination between ACT and the other parties involved in the development of the criteria.
3. In spring 2003, or the first year following the "full test" that reservoir elevation and runoff criteria can be met, the Corps shall implement full flow enhancement releases out of Fort Peck Reservoir based on the criteria addressed above or modified, as appropriate, by the ACT from the 2002 "full test" results.

The pallid sturgeon population remaining below Fort Peck Dam and above Lake Sakakawea represent an important portion of the total population. The adult pallid sturgeon within this reach are nearing the end of their life expectancy and individual female pallid sturgeon may only attempt reproduction during one or two more spawning events. Necessary actions, including baseline monitoring of the habitat conditions, the response of pallid sturgeon to enhanced flows, and coordination of actions, shall be conducted so that a full test of the improve improved flow regime can be implemented by 2002, if appropriate runoff and reservoir conditions occur. In cooperation with the Service, USGS, WAPA, North Dakota Game and Fish Department, Montana Department of Fish, Wildlife, and Parks, and other partners, the Corps shall establish a protocol for monitoring prior to the 2001 test.

- C. **Other Segments:** Through adaptive management, the Corps shall investigate the applicability of flow enhancement at Garrison by 2005 and implement, if appropriate.

### III. Unbalanced Intrasystem Regulation

Currently, the Corps "balances" the amount of water in storage in the three largest Upper Missouri River main stem system lakes, i.e., Fort Peck Lake (Segment 1), Lake Sakakawea



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501

FEB 28 2001

Colonel Mark Tillotson  
District Engineer, Omaha District  
Attn: Mr. William D. Miller  
U.S. Army Corps of Engineers  
215 North 17<sup>th</sup> Street  
Omaha, Nebraska 68102-4978

Dear Colonel Tillotson:

This letter is in response to questions directed to Mike Olson, Missouri River Coordinator, by Bill Miller, Project Manager, Fort Peck Flow Modification Project, and members of the Fort Peck Assiniboine and Sioux Tribes during a February 16th meeting in Poplar, Montana. Of primary concern was the relationship of Milk River flows to the Fish and Wildlife Service's (Service) recommendations for flows in the Missouri River below Fort Peck Dam which we provided in our biological opinion.

The objectives identified in the biological opinion include both a warming of the water and an increase in stage sufficient to trigger a positive response by native river fish species like the pallid sturgeon. The Corps has indicated that, at this time, the final implementation plan would include a spring rise of 20-25 kcfs (probably 23 kcfs) below Fort Peck Dam. The rise in water will accompany a temperature target of 18 degrees Celsius at Frazer Rapids. The exact flow amounts, timing, temperature, and location requirements will be finalized following the mini and full tests.

The Service would like to clarify the description of the flow enhancement identified in the biological opinion. Our recommendations for flows in the Missouri River should include those flows coming from the Milk River. The Milk provides important temperature and sediment to the Missouri below Fort Peck and these flows will greatly assist native river fish species. Therefore, if the Milk is flowing at 5 kcfs and the final flow implementation plan calls for 23 kcfs, the difference of 18 kcfs should be provided by the combined spillway and powerhouse releases from Fort Peck Dam to meet the flow and temperature targets.

If you have any questions, please contact Mike Olson at 701-250-4481 or Roger Collins at 701-250-4492.

Sincerely,

A handwritten signature in black ink, appearing to read "Allyn J. Sapa". The signature is fluid and cursive, with the first name being the most prominent.

Allyn J. Sapa  
Field Supervisor  
North Dakota Field Office

cc: Mike Olson, MR Coordinator, Bismarck  
Tom Escarcega, Natural Res. Director, Assiniboine and Sioux Tribes of Fort Peck, Poplar  
Arlyn Headdress, Chairman Assiniboine and Sioux Tribes of Fort Peck, Poplar



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501



MAR 4 2001

Colonel Mark Tillotson  
District Engineer, Omaha District  
Attn: Mr. William D. Miller  
U.S. Army Corps of Engineers  
215 North 17<sup>th</sup> Street  
Omaha, Nebraska 68102-4978

Dear Colonel Tillotson:

During the past 2 months, Fish and Wildlife Service (Service) and Corps of Engineers (Corps) staff have discussed various aspects of the Reasonable and Prudent Alternative of the Missouri River Biological Opinion related to the Fort Peck Flow Enhancement. In response to a March 23, 2001, verbal request from the Service to the Corps for issues needing clarification or apparent conflicts in the Biological Opinion regarding the Fort Peck Flow Modification, Bill Miller of your staff provided the Service with a draft list of comments and questions. The Corps' list and the Service's response to each of the issues is provided below to further clarify the issues for use in the development of the Environmental Assessment for the Fort Peck Flow Modification and incorporation into the Biological Opinion (BO) Implementation Plan. Relative to the Biological Opinion, these issues will be corrected/clarified on an errata sheet the Service has been developing.

1. **COE Comment:** Full flow enhancement coincides with an unbalancing cycle of Fort Peck Lake being high and Lake Sakakawea being low. Please verify?

**FWS Response:** The Service indicated on page 235 of the BO that the Fort Peck flow enhancement should be incorporated into the unbalancing strategy for the upper three reservoirs. This would logically be accomplished when Peck is high enough to meet the threshold elevation to conduct the flows and could be drawn down the 3 feet for unbalancing and when Sakakawea could support the additional water. However, the absolute statement above might preclude other acceptable reservoir storage scenarios and the adaptive management philosophy promoted by the Service. Therefore, we believe this is the type of issue we envision the Agency Coordination Team (ACT) would evaluate and make recommendations on how best to incorporate unbalancing and Fort Peck flow enhancement.

2. **COE Comment:** If other factors prevent full flow enhancement, the Corps will wait until next cycle unless conditions have Fort Peck Lake high and Lake Sakakawea low, then implement. Please verify?

**FWS Response:** Although unbalancing of the upper three reservoirs ideally is based on a 3-year cycle and Fort Peck flows are needed, on average, once every 3 years, based on operational experience storage and runoff conditions likely would not allow such a regimented schedule for actual implementation. Therefore, through ACT recommendations, the Corps should be opportunistic and implement Fort Peck flows and unbalancing of the upper three reservoirs in any given year that storage and runoff conditions are favorable and not wait for the "beginning" of a new 3-year cycle.

3. **COE Comment:** In response to public concerns, can flow enhancement initiation start 7 days after rising stage at Ulm, Montana, gauge. Please verify?

**FWS Response:** We understand the public, especially irrigators, would like as much advance notice of initiation of Fort Peck flow enhancement as possible. On pages 235 and 236 of the BO, the Service indicated the initiation of flow enhancement shall emulate the timing of the natural inflow into the lake, but not before May 15 because of cold water temperatures. We suggested the Landusky gauge be used as the reference gauge and the flow enhancement begin 2-3 days after the rising stage to coincide with travel time to the dam.

We reviewed USGS data for dates of peak spring flows from both the Landusky and Ulm gauges to determine if the peak at Ulm, on average, occurs earlier than Landusky and has about a 7-day travel time to the dam. In general, we found the peaks at both gauges occur at approximately the same dates, with the peak at Landusky occurring earlier than Ulm in just over 50 percent of the years. Therefore, we suggest the Landusky gauge continue to be the reference point, but have no objection to changing the start date to 7 days after detection of a rising hydrograph at that gauge. We will modify this section of the BO via the errata sheet.

4. Questions regarding peak discharge:

- a. **COE Comment:** Page 236 states "between 20 Kcfs and 25 Kcfs while summary on page 273 states 20-30 Kcfs." Which is correct?

**FWS Response:** The discussion between the Service, Corps, States, and MRNRC has focused on a discharge between 20 and 25 Kcfs, with a target of approximately 23 Kcfs. The range of 20-25 Kcfs on page 236 is correct. Page 273 will be corrected in an errata sheet to reflect 20-25 Kcfs.

- b. **COE Comment:** Page 236 talks about the Fort Peck discharge only in terms of spillway and powerhouse discharges, while the letter to the Omaha District, dated February 28, 2001, also includes Milk River flows. Please verify letter?

**FWS Response:** The February 28, 2001, letter accurately reflects the Service's position on the combination of spillway, powerhouse, and Milk River flows to achieve the target spring rise flows and warm water temperature.

- c. **COE Comment:** Page 236 states peak discharge will persist for a minimum of 3 days and warm water releases should continue for at least 30 days. The summary on page 273 addresses a spring release for a minimum of 3 weeks. Does this address the peak discharge minimum of 3 days versus minimum of 3 weeks or the total release at least 30 days versus minimum of 3 weeks? Please clarify both issues?

**FWS Response:** In general, the spring rise component of the Fort Peck Flow Enhancement (i.e., combination of spillway and powerhouse discharges, as well as input from the Milk River) should emulate the natural inflow into the lake and last approximately 30 days. The rise should be characterized by a gradual ramping up to the peak discharge, hold the peak for a minimum of 3 days, and a gradual ramping down to normal flow management for that year. The warm water release component (i.e., integrated release from the spillway and powerhouse, and including Milk River flows) to meet the temperature target at Frazer Rapids should occur for a minimum of 30 days during the spring rise and integrated spillway releases should continue up to 60 days from initiation, as needed, to achieve the temperature target. In any given year, specifics may need to be addressed by the ACT.

5. **COE Comment:** Page 236 states "The combination of releases from the spillway and powerhouse should be mixed to achieve a minimum target temperature of 64.4 degrees F (18 degrees C) at Frazer Rapids (RM 1746)." Although no time period is included in the requirement stated above, conversations between the Service and Corps staff indicate the target temperature of 64.4 degrees F is to be maintained at Frazer Rapids by use of spillway discharges after the "30-day warm water release" period until natural warming of the river waters occurs. Please clarify? Please provide a limit on the spillway releases in total number of days from initiation.

**FWS Response:** Please see the Service response to Number 4 © above regarding the warm water release component.

6. **COE Comment:** Page 273, Summary. The implementation objective column does not include the availability of water limitation.

**FWS Response:** Table 24 is merely a summary of the narrative from the BO and does not include a total replication on information in the BO. The Implementation Objective highlights the objective, i.e., to implement the Fort Peck Flow Enhancement on average once every 3 years, but does not include all the constraints or sideboards. This is addressed in the narrative portion of the BO.

7. **COE Comment:** The Summary, page 273, addresses a spring release between “May and the end of June,” while page 236 states initiation of the spring release is tied to a rising stage in a gauge, but not before May 15. Please clarify in coordination with comment number 3 above.

**FWS Response:** The information on page 236 and number 3 above more accurately reflects the spring rise than the generic bullet statement in Table 24. The Service will modify this statement in Table 24 in the errata sheet to be more specific.

8. **COE Comment:** If the forage fish spawn is still occurring on May 15, does the Corps delay the start of the spring releases? Please clarify (reference page 236).

**FWS Response:** As stated on page 235 of the BO, the Fort Peck releases should be timed to avoid lowering the lake during the forage fish spawn (approximately mid-April to mid-May). If the trigger for the spring rise (i.e., rising stage at a selected gauge, but not before May 15) coincides with the May 15 date and the forage fish spawn is still occurring, the ACT should be consulted to assess the status of the forage fish spawn and natural inflows and determine if a delay in the spring rise is appropriate.

9. **COE Comment:** On page 236, the full flow enhancement release is to be “the first year following the full test.” Please clarify what is to happen if “this-first-year-following” does not match the proper unbalancing strategy year (see comment number 2 above)?

**FWS Response:** The BO states that the full flow enhancement releases shall be implemented the first year following the “full test” that reservoir elevation and runoff criteria can be met. The unbalancing strategy also considers elevation and runoff criteria. Again, this type of issue will be addressed by the ACT to take advantage of the opportunities in any given year and not wait to try and hit the beginning of a “new” cycle.

10. **COE Comment:** Stop protocols are being developed which address issues (cultural resources, erosion, etc.) not addressed by the Biological Opinion. Does the FWS concur with temporary stops in the flow enhancement to address these issues?

**FWS Response:** These type of protocols were not addressed in the BO because they are not biological in nature. The Corps must assess these issues in light of its agency responsibilities and consult with the ACT to determine how such protocols will affect the ability of the Corps to meet the RPA and RPM elements of the BO. Dependent upon the nature of the stop protocols, the Service may or may not concur with temporary stops. However, the burden of responsibility for development of stop protocols lies with the Corps.

11. **COE Comment:** Some conversations have implied that the full test would serve as the first full flow enhancement. Please clarify.

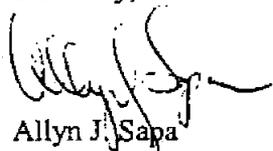
**FWS Response:** No, this is not the case. The full test is a test that will provide additional information to use in the development of full implementation criteria which may or not be the same from the full test. Hopefully, monitoring and evaluation will provide sound biological information and the basis for any modifications to the criteria, timing, and flows used in the full test.

12. **COE Comment:** Page 231 states the ACT should involve additional agencies or groups. Will the Upper Missouri River Coordinated Resource Management Group (MT) have members on the ACT when the ACT is addressing Fort Peck Flow Modification issues.

**FWS Response:** As stated on page 231 of the BO, the agency coordination team (ACT) will serve to guide development and implementation of river management measures to benefit threatened and endangered species. Thus, ACT is comprised of those agencies with biologic or engineering expertise related to elements of the RPA and RPMs and will focus on formulating the best recommendations possible to implement the RPA and RPMs and benefit the listed species. We envision this group as a dynamic group of biologic or engineering expertise comprised of varying representatives of the Corps, Service, MRNRC, MRBA, Tribes, etc, dependent upon the specific issue. If the Corps, in coordination with the Service, believes this group has such expertise to offer to meet these needs, the participation of the group may be warranted. Otherwise, participation of this group and most stakeholders in the basin might best be served through a basinwide Recovery and Implementation Program, which would be much broader in scope.

If you have any questions, please contact Roger Collins at 701-250-4492.

Sincerely,



Allyn J. Sapa  
Field Supervisor  
North Dakota Field Office

cc: Mike Olson, MR Coordinator, Bismarck

cc: Susan Linner, ES, R-6, Denver, CO  
Mike Stempel, Fisheries, R-6, Denver, CO  
David Redhorse, R-6, Denver, CO  
Mark Wilson, ES Field Supervisor, Helena, MT  
Mike George, Omaha District, Omaha, NE  
Mike Ruggles, MT Fish, Wildlife and Parks, Fort Peck, MT  
Pat Braaten, USGS, Columbia, MO

PAG 13  
A 11/10/01DEPARTMENT OF THE ARMY  
NORTHWESTERN DIVISION, CORPS OF ENGINEERS  
P.O. BOX 2870  
PORTLAND, OREGON 97208-2870

25 OCT 2001

Division Engineer

Dr. Ralph Morgenweck  
Regional Director, Mountain-Prairie Region  
U.S. Fish and Wildlife Service  
PO Box 25486  
Denver Federal Center  
Denver, CO 80225-0486

Dear Dr. Morgenweck:

This is in reply to your letter of November 30, 2000, transmitting to BG Carl Strock the Missouri River Final Biological Opinion (Biological Opinion) of the same date. That Biological Opinion covered the operation of the Missouri River Mainstem Reservoir System (Mainstem System), the operation and maintenance of the Missouri River Bank Stabilization and Navigation Project (BSNP), and the operation of the Kansas River Reservoir System (Kansas River System). The Biological Opinion finds that current operation and maintenance activities of the three projects would jeopardize the continued existence of three Federally listed threatened and endangered (T&E) species: the interior least tern, the piping plover, and the pallid sturgeon. The Biological Opinion also concludes that there will be an incidental take of bald eagles, interior least terns, piping plovers, and pallid sturgeon.

The Biological Opinion presents your recommendation for a Reasonable and Prudent Alternative (RPA), with numerous elements, to avoid jeopardy for these species. Main elements of the RPA are:

- unbalanced system operation
- adaptive management
- flow-related operational changes from Fort Peck and Gavins Point Dams
- T&E species habitat restoration/creation/acquisition
- T&E species-specific measures to avoid jeopardy.

This letter documents our current plan to respond to the Biological Opinion.

**Unbalanced System Operation.** This flow-related element of your recommendations is being pursued through our Mainstem Annual Operating Plan process. The current dry conditions in the upper Missouri River Basin precluded implementation of this element in 2001; however, we plan to implement it as soon as runoff conditions permit.

2.

**Adaptive Management.** We have established an Agency Coordination Team (ACT) to initiate the adaptive management process, and we hosted the first ACT meeting in Denver, Colorado, on March 28, 2001. The ACT will guide development and implementation of future river management measures to benefit Federally listed species consistent with the Corps' statutory responsibilities. The first ACT meeting was attended by representatives from our two agencies, the Western Area Power Administration, the Environmental Protection Agency, the Missouri River Basin Association (MRBA), the Missouri River Natural Resources Committee (MRNRC) and the Mni Sose Tribal Water Rights Coalition. Our staffs are also working with the MRBA and MRNRC to develop a proposal to improve the exchange of scientific information pertaining to adaptive management with Tribes, state agencies, interest groups, and individual stakeholders in the basin. We are currently preparing a comprehensive monitoring and evaluation (M&E) plan. Portions of the comprehensive M&E plan have been implemented in past years since the first T&E listings in the late 1980's. We will begin to implement the remainder of the comprehensive M&E plan in calendar year 2002. We will also prepare an annual report that documents Corps actions to implement the Biological Opinion, beginning with actions that took place in calendar year 2001. The annual report will also present Biological Opinion Implementation elements planned for the upcoming year.

**Ft. Peck Flows.** We are analyzing the other flow-related recommendations in the Biological Opinion in two National Environmental Policy Act (NEPA) processes. First, a proposal for a one-year "mini-test" of the flow-related Fort Peck recommendations is the subject of an ongoing NEPA environmental assessment. Assuming a Finding of No Significant Impact, this NEPA process will be completed in time to allow the mini-test to proceed in the spring of 2002. As you know, the mini-test would involve higher than normal spring releases from Fort Peck, including releases from the emergency spillway to effect warmer water in the downstream river reach. We are pursuing the mini-test to help answer questions regarding potential negative impacts to the spillway and the river channel downstream of Fort Peck Dam, and to begin monitoring positive impacts to the native river fishery. We had planned to conduct the mini-test this year, assuming the completion of the NEPA process. Unfortunately, low Fort Peck Lake levels, below that needed to release water over the emergency spillway, prevented the execution of the mini-test. We will continue to pursue the mini-test, and a full test in the subsequent year after the mini-test, when lake levels allow.

**Gavins Point Flows.** We are analyzing the flow-related recommendations relating to changes to the Gavins Point Dam operation in the NEPA process as part of the ongoing Missouri River Master Manual Review and Update effort. That process is scheduled for completion in early 2003. We have released the Revised Draft Environmental Impact Statement (RDEIS) for the Review and Update that includes the following six water control plan alternatives: the current water control plan, a modified conservation plan, and four alternatives which address the full range of changes in water releases from Gavins Point Dam covered in the Biological Opinion. Water control plan alternatives also include the recommendations on changes to Fort Peck releases. We will take comments on the RDEIS until the end of February 2002. At that time, we

will consult with you as we evaluate the results of the NEPA process and select a preferred alternative. A final EIS for the Review and Update is scheduled for completion in May 2002, with a Record of Decision anticipated in October 2002. The final EIS will identify a preferred alternative and state a comprehensive explanation for its' selection. Implementation of any changes to the current Water Control Plan will begin in March 2003, after the preparation and circulation of the 2003 Annual Operating Plan.

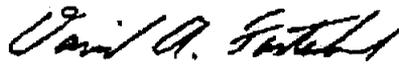
**Habitat.** A significant amount of shallow water habitat has been restored, created, and acquired for the benefit of native river fish under the BSNP Missouri River Fish and Wildlife Mitigation Project, by Section 1135 environmental restoration projects, and through modifications to existing river structures. However, the Biological Opinion recommends a significant increase in shallow water habitat to benefit the pallid sturgeon and sandbar habitat to benefit the terns and plovers, 2,000 acres by 2005 and 19,565 acres by 2020. Sandbar habitat acreage goals vary by year and river reach.

We intend to pursue the restoration or creation of shallow water habitat for native river fish (less than 5 feet deep with a velocity of less than 2 feet per second) consistent with your recommendations. To the extent we need additional authorities, we will actively pursue them; we will also seek whatever appropriations are needed to allow that restoration and creation of habitat. The non-flow related recommendations may need to be evaluated in accordance with NEPA. Decisions regarding the timing and scope of NEPA processes will be made to provide timely implementation of those recommendations. The annual report on Biological Opinion implementation will include discussions of any anticipated NEPA processes. We will continue to create, enhance and maintain emergent sandbar habitat by mechanical manipulation. This may include construction of islands in reservoir headwaters and river reaches, diking and island construction in secondary bays, peninsula cutoffs, overburden removal and fencing of peninsula habitat, dewatering, and vegetation removal. The results of these efforts will be monitored to ensure the most effective methods are being used, and will be included in the annual Biological Opinion implementation report.

**T&E Specific Measures.** Regarding your species-specific recommendations, we will continue to monitor least tern and piping plover fledge ratios as we have for the last 15 years on the Missouri River and 5 years on the Kansas River. The Great Plains piping plover forage ecology study was scoped in 2000 and commenced during the 2001 nesting season. We remain committed to working with the pallid sturgeon recovery working groups to develop and implement an effective population assessment program similar to the ongoing efforts for the least tern and piping plover. As stated in the Biological Opinion, these efforts are designed to obtain additional scientific information on pallid sturgeon necessary to inform decisions on habitat restoration and flow regulation through an adaptive management process. We will work with your staff and other scientists to develop a monitoring and evaluation framework to gather this scientific information on sturgeon spawning and rearing habitats. We will also pursue near-term assistance for maintaining viable pallid sturgeon genetic stocks through population augmentation with hatchery-reared fish.

We will continue to evaluate historic and potential future take for the current operation, and any potential changes to the operation of the Missouri River and Kansas River Reservoir Systems. We will evaluate and improve management methods that have the potential to minimize take, such as captive rearing and predator aversion, through adaptive management. Evaluation of operational impacts to pallid sturgeon will continue as basic knowledge of the species status, population trends, habitat condition and distribution is gained through population monitoring and evaluation activities. We will pursue a comprehensive public outreach program to increase public awareness and support conservation measures.

We look forward to working with you and your staff as we respond to the Biological Opinion. It remains the intent of the U.S. Army Corps of Engineers to complete the public comment period on the RDEIS addressing the flow-related components of the Biological Opinion on February 28, 2002. Following this public review, a Final Environmental Impact Statement is scheduled for May 2002. I will continue to work with the Service in a cooperative manner to ensure that future actions in response to the Biological Opinion are based upon the best science and engineering available.



David A. Fastabend  
Colonel, Corps of Engineers  
Division Engineer

January 25, 2002

Planning, Programs, and Project Management

Mr. Al Sapa, Supervisor  
U.S. Fish and Wildlife Service  
3425 Miriam Avenue  
Bismarck, North Dakota 58501

Dear Mr. Sapa:

The Omaha District Corps of Engineers (Corps) is preparing to release a draft Environmental Assessment (EA) for a mini test flow modification out of Fort Peck Dam. The mini test is a component of the Reasonable and Prudent Alternative elements for Multiple Species, item II B (1) for Fort Peck Dam, which is found within the November 30, 2000 Biological Opinion on the Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas River Reservoir System.

The implementation of the mini test (discharge 15,000 cfs) would likely increase river surface elevations by approximately 1.5 feet during the month of June 2001. This increase is in comparison to the average June river elevation in the absence of such a test (discharge 10,500 cfs).

The EA currently discusses how the Corps would monitor for early-nesting least terns and piping plovers and, if needed, relocate these nests to higher elevations or to the hatchery facility at Gavins Point Dam. Both options are available under the Corps' endangered species collection permit for least terns and piping plovers. However, a Biological Assessment (BA) has not been accomplished in conjunction with the mini test, because the mini test action itself is the implementation of an RPA resulting from an earlier Endangered Species Act (ESA) consultation effort.

Please provide our office with written response affirming that a BA is not needed, and that all ESA obligations for the mini test are met by the above actions. Point of contact for this office is Becky Latka (402) 221-4602.

Sincerely,

Candace Gorton  
Chief, Environmental, Economic, and  
Cultural Resources Section  
Planning Branch

Copy Furnished:

Mr. Mark Wilson  
U.S. Fish and Wildlife Service  
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P.O. Box 10023  
Helena, Montana 59601

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CENWO-OD-GP (Kruse)

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## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501

FEB 20 2002



Ms. Candace Gorton  
Chief, Environmental, Economic, and  
Cultural Resources Section  
Planning Branch  
U.S. Army Corps of Engineers  
Omaha District  
106 South 15<sup>th</sup> Street  
Omaha, NE 68102-1618

Dear Ms. Gorton:

This letter responds to your letter, dated January 25, 2002, regarding the need for a Biological Assessment (BA) for the mini-test flow modification out of Fort Peck Dam.

The primary purpose of a BA is for the action agency to determine if a proposed Federal action is likely to adversely affect listed or proposed species. The Fish and Wildlife Service (Service) has already considered the effects of the mini-test in the development of the Reasonable and Prudent Alternative for the November 2000 Missouri River Biological Opinion and determined that it is an integral component of the Fort Peck flow modifications to avoid jeopardy to listed species. In addition, the Corps of Engineers (Corps) is not required to prepare a BA for actions that are not major construction actions; and the assessment on endangered species may be undertaken as part of the Corps' compliance with the requirements of Section 102 of the National Environmental Policy Act for an Environmental Assessment (EA).

Therefore, if the Corps summarizes in the EA the effects/benefits of the Fort Peck flow modifications on the least tern, piping plover, and pallid sturgeon, as documented in the biological opinion, the Service believes that a separate BA is not needed for the Fort Peck mini-test.

The Service looks forward to reviewing the draft EA. If you have any questions regarding this letter, please contact Roger Collins (701-250-4492).

Sincerely,

Allyn N. Sapa  
Field Supervisor  
North Dakota Field Office

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