

Appendix E EA Distribution List

SHOSHONE-BANNOCK TRIBES, FORT HALL

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Shoshone-Bannock Tribes
PO Box 306
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Marlene Skunkcap
Fort Hall Business Council

Shoshone-Bannock Tribes
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Fort Hall, ID 83203-0306

Tony Galloway, Chairman
Land Use Commission
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Edmund Wayne George
Land Use Commission
Shoshone-Bannock Tribes
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Tony Shay
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Ellen Ball
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Lester “Sam” Galloway
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Mr. B.J. Howerton
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U.S. Fish and Wildlife Service
Damien Miller
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U.S. Fish and Wildlife Service
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Botanist
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Attn: Mr. Bruce Suzumoto
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Hydropower Division
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Portland, OR 97232-1274

Idaho Department of Agriculture
Attn: Mr. Patrick Takasugi
2270 Old Penitentiary Road
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Bureau of Land Management
Idaho State Director
1387 South Vinnell Way
Boise, ID 83709

Bureau of Land Management
Idaho Falls District Manager
1405 Hollipark Drive
Idaho Falls, ID 83401

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Chief of Staff
700 West Jefferson, 2nd Floor
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Boise, ID 83720-0034

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Upper Snake Region
Regional Supervisor
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4279 Commerce Circle
Idaho Falls, ID 83401

Idaho Depart of Environmental Quality
Pocatello Regional Office
Attn: Mr. Steve Allred
444 Hospital Way, #300
Pocatello, ID 83201

Idaho Department of Lands
Director
Attn: Mr. Winston Wiggins
PO Box 83720
Boise, ID 83720

Idaho Department of Water Resources
Attn: Mr. Karl Dreher
PO Box 83720
Boise, ID 83720

Idaho Association of Soil Conservation
Executive Director
Attn: Mr. Kent Foster
6003 Overland Rd., Suite 204
Boise, ID 83709

LIBRARIES

South Bannock District
Downey Library
18 North Main, PO Box D
Downey, ID 83234

Shoshone-Bannock Library
HRDC Building, Bannock and Pima St.
Fort Hall, ID 83202

North Bingham County District Library
197 W Locust St
Shelley, ID 83274-1309

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The Nature Conservancy
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116 1st Avenue North
Hailey, ID 83333

Idaho Conservation League
Attn: Mr. Scott Brown
PO Box 844
Boise, ID 83701

Trout Unlimited
Project Director-South Fork Snake River
Home Rivers Initiative
Attn: Mr. Matt Woodard
151 North Ridge Ave., Suite 120
Idaho Falls, ID 83402

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Pingree, ID 83262-1306

Larve Rich
1195 W 600 S
Pingree, ID 83262-1306

Roland Rich
1213 W 600 S
Pingree, ID 83262-1319

Thorne Springs Ranch
14710 Tanner TRL
Elbert, CO 80106

Larry and Merna Watt
462 S 1200 W
Pingree, ID 83262-1319

Lori C Miller
1219 W 600 S
Pingree, ID 83262-1319

Samuel and Joanne Beck
730 S 1325 W
Pingree, ID 83262-5884

Val Ray and Lorelee Beck
746 S 1325 W
Pingree, ID 83262-1544

Herman R. and Marry Ellen Queen
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Pingree, ID 83262-2958

THOMPSON BROTHERS
493 S 1200 N
Pingree, ID 83262-1067

Bernadine and Glen Tabor
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Elbert, CO 80106-5078

Val C. and Heather I. Carter
1025 S 1500 W
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L. Tim and Lucille Pierce
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Linden, UT 84042-5231

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San Ramon, CA 94583-1549

Rockin S Equipment Company
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Ron and Vickie Gentillon
C/O Rockin S Equipment Company
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Loyal A. and Barbara Hopkins
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Pingree, ID 83262-1719

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Commissioners

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Pocatello, ID 83205-4016

Board of Bingham County
Commissioners
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Blackfoot, ID 83221-1028

Power County Board of Commissioners
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Boise, ID 83702

Honorable Mike Crapo
United States Senator
304 N 8th Street, Room 338
Boise, ID 83702

Honorable C.L. Butch Otter
Member, United States House of
Representatives
304 N 8th Street, Room 454
Boise, ID 83702

Honorable Mike Simpson
Member, United States House of
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304 N 8th Street, Room 454
Boise, ID 83702

NEWS MEDIA

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Fort Hall, ID 83203

**Appendix F Public Comment Letters &
Reclamation's Responses**



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A • Idaho Falls, Idaho 83402-1718

Phone: (208) 525-7161 • Fax: (208) 525-7177 • Web Site: www.idwr.idaho.gov

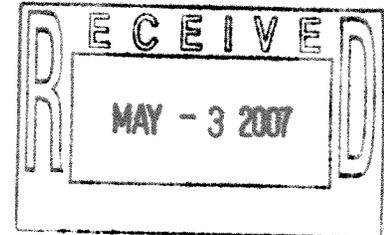
EASTERN REGION

C. L. "BUTCH" OTTER
Governor

DAVID R. TUTHILL, JR.
Interim Director

May 1, 2007

US Bureau of Reclamation
Attn: Mr. Robert Boyer
1359 Hansen Ave
Burley, ID 83318



Dear Mr. Boyer:

This letter is to inform you that you do not need an Idaho Department of Water Resources (IDWR) Stream Channel Alteration Permit for stabilizing 3800 linear feet of the Snake River located in the NW ¼ of Section 5, Township 4S, Range 33E, B.M., in Bannock County, Idaho. The project entails work located on the Fort Hall Indian Reservation and thus is exempt from stream channel alteration rules under Idaho Code. Though you are exempt from obtaining a Stream Channel Alteration permit we recommend that you utilize Best Management Practices (BMP) to limit sediment transport into the Snake River. We also recommend you utilize vegetation plantings behind the rock riprap for biological and aesthetic attributes and to aid in additional bank stabilization.

This does not relieve you of the responsibility to obtain any other local, state, or federal permits that may be required, such as those required under the Clean Water Act or local ordinances required to meet federal flood insurance guidelines. A copy of this letter is being sent to the Corps of Engineers and the local county administrators.

If you have any questions or require any additional assistance, please do not hesitate to contact this office.

Sincerely,

Tom Bassista
Stream Protection Specialist

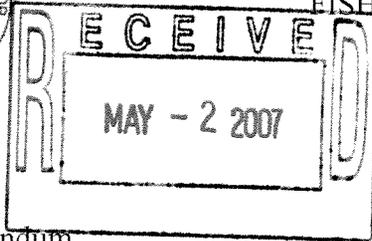
ec: COE (Idaho Falls); Bannock County



United States Department of the Interior

FISH AND WILDLIFE SERVICE

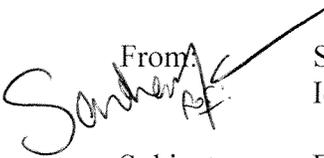
Eastern Idaho Field Office
4425 Burley Dr., Suite A
Chubbuck, Idaho 83202
Telephone (208) 237-6975
<http://IdahoES.fws.gov>



MAY 01 2007

Memorandum

To: Deputy Area Manager, Snake River Area Office-East Unit, Bureau of Reclamation, Burley, Idaho

From:  Supervisor, Eastern Idaho Field Office, Fish and Wildlife Service, Chubbuck, Idaho

Subject: Fort Hall Landmark Bank Stabilization Project on the Fort Hall Reservation of the Shoshone-Bannock Tribes in the Upper Snake Basin, Idaho - Concurrence
File # 1008.0000 TAILS # 07-I-0423

The Fish and Wildlife Service (Service) is writing to provide concurrence with your determination of effects on listed species for the proposed Fort Hall Landmark Bank Stabilization Project (Project) on the Fort Hall Reservation of the Shoshone-Bannock Tribes in the Upper Snake River Basin, Idaho. In a letter dated April 4, 2007, and received by the Service on April 6, 2007, the Bureau of Reclamation (Bureau) requested concurrence with its determination that the proposed Project may affect, but is not likely to adversely affect Ute ladies'-tresses (*Spiranthes diluvialis*), documented within the accompanying Environmental/Biological Assessment (Assessment) for the Project. Additionally, the Service acknowledges your determination that the Project will not affect gray wolf (*Canis lupus*), bald eagle (*Haliaeetus leucocephalus*), and Utah valvata snails (*Valvata utahensis*). The following Service comments are provided in accordance with section 7 of the Endangered Species Act of 1973, as amended.

The Service understands the Bureau proposes to implement a streambank stabilization project to protect the Fort Hall National Historic Landmark from erosion by the Snake River. The Landmark boundary is situated within the Fort Hall Reservation boundaries, and is approximately 9 acres in size. The Landmark originally was located approximately 150 yards from the river bank; however, as a result of many floods and subsequent bank erosion, the river channel has altered its course and the Landmark is presently 17 yards from the river bank. The Snake River channel is eroding into the Tribal lands and is threatening the Landmark by decreasing the area and stability of the bank.

The preferred alternative for Project completion includes a bank height stone toe. Project details entail placing a rock barrier over and adjacent to the current river bank for a length of 3,800 feet. There is no bank excavation required for placement of the rock barrier. Soil or additional rock would be needed to bring the existing vertical undercut bank to an angled slope of 1.5:1. The outside ends of the stone tow would include a feature called a "key-in". The key-in would be

comprised of sheet pile (interlocking "S" shaped steel plates) driven into the ground. The sheet pile extends from the outside ends of the stone toe and is angled into the bank for 200 feet on the upstream end and 30 feet on the downstream end. This feature creates a rigid barrier to prevent undercutting and the stream from circumventing the stone toe. There would be approximately 20-30 feet of excavation into the bank to secure the stone toe to the sheet pile. The zone of this disturbance for sheet pile placement is approximately 2 feet wide by 15 feet deep for a distance of 200 feet on the upstream end and a distance of 30 feet on the downstream end. Project activities are not expected to commence until mid-September 2007.

Ute ladies'-tresses are known to occur in Bonneville, Fremont, Jefferson, and Madison Counties along the Snake River and from wetland sites along the Henry's Fork River; however, they occur in greatest numbers along the South Fork of the Snake River.

In 2006 there was an unconfirmed siting of Ute ladies'-tresses on Fort Hall Reservation. Due to the potential for Ute ladies'-tresses to occur on the Reservation, and because potential habitat exists within the Project area, the Bureau has elected to conduct Ute ladies'-tresses surveys prior to any Project construction. If the survey (to be conducted in August) identifies Ute ladies'-tresses in the Project area, the Bureau will document the occurrence, flag the area, and avoid impacting it entirely during construction activities.

Based on the information provided in the Assessment, the conference call held on November 6, 2006 with the Service, Bureau, and Tribe, conversations held with Sue Tholen and Toni Turner of your staff, and the fact that should any Ute ladies'-tresses be identified in the Project area, they would be avoided, the Service concurs with the Bureau's determination that the proposed Project may affect but is not likely to adversely affect Ute ladies'-tresses.

This concludes consultation under section 7 of the Endangered Species Act of 1973, as amended. Please contact the Service to verify the above determination is still valid if: 1) the project is changed or new information reveals effects of the action to a listed species to an extent not considered in the Assessment; or 2) a new species is listed or critical habitat is designated that may be affected by the Project.

We appreciate your conscientious efforts to comply with Federal requirements. If you have any questions regarding this letter, please contact Sandi Arena of the Service's Eastern Idaho Field Office at 208-237-6975 ext. 34.

cc: Service, Boise (Glenn)

Reclamation's responses to the May 1, 2007 comments from USFWS		
Issue	Reclamation's response	For further information, refer to the Fort Hall National Historic Landmark Bank Stabilization Project Final EA
The DEA states that "There is one bald eagle near the proposed project area on the east bank..." Please provide the distance this nest is from the construction site.	Final EA has been revised to include this information.	Chapter 3, page 71
It is believed that a Ute Ladies' -tresses survey was conducted by BLM, Cleve Davis, in 2006 that documented the orchid was present on the Reservation. The Draft EA only documents the surrogate Chester wetlands site, which is off the Reservation, but does not mention the survey completed on the reservation. Please clarify.	It is unclear if the survey completed by Cleve David actually found the orchid on the Reservation as there was no official documentation of any such finding at the time of the DEA release. Also, the Tribe had requested that any information about the possible locations of the orchid remain confidential. In our effort to respect the Tribe's request, we used the Chester wetlands information as an "indicator" site so that we could adequately address this issue without revealing confidential information about the species presence or lack of presence on Tribal land.	
The surrogate site (Chester wetlands) was used as the basis for Reclamation's estimate that 3 to 4 plants may be impacted during construction. USFWS cannot give a "may affect/not likely to adversely affect" call if even one plant is impacted.	If the August survey uncovers any Ute Ladies' -tresses in the project area (there is one area on the project site that may contain suitable habitat), we will document the location of the orchid on the plan set, flag the area prior to construction, and avoid impacting it entirely during construction as requested (work around it as necessary). It is our understanding that if we complete that documentation, USFWS can make a "may affect, not likely to adversely affect" decision.	



United States Department of Agriculture
Natural Resources Conservation Services

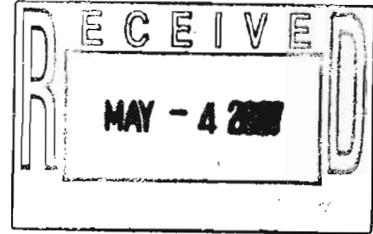
Natural Resources Conservation Service
P.O. Box 306
Fort Hall, ID 83203

"A Partner in Conservation Since 1935"

Kurt Cates, District Conservationist
Phone: 208-478-3778
fax: 208-238-8018
Email: kurt.cates@id.usda.gov

*2000
to 3000
Cates to PN 6305*

Robert (Hap) Boyer,
Bureau of Reclamation,
1359 Hansen Avenue,
Burley ID 83318



Re: Comments to Draft EA for Fort Hall National Historic Landmark Bank Stabilization project

The following are my comments:

My concern is on the upper portion of this stretch of river where the "demonstration project" was installed in 2001.

The draft EA does not give enough, if any detail on the current condition of this portion of the riverbank (left bank). The Environmental Quality Incentive Program (EQIP) contract that the Shoshone-Bannock Tribe (Tribe) signed with NRCS has armored this bank more than adequately to withstand most high flows on the river. There are native grasses, willows and cottonwood trees that have come in naturally and are helping to protect this bank. I don't believe that this was adequately taken into account in the initial assessment of this area for the designs. The BOR was told in meetings in 2004 that the Tribe had the EQIP contract. The designs in the draft EA does not take into account that the Tribe had signed the contract and was planning on planting willows in this area. It states on page 7 that Reclamation will coordinate with the Tribes and NRCS as to the optimal time to begin this effort upon completion of the proposed project. After the meetings in 2004, the NRCS was never again contacted by the BOR about attending any meetings or any consultation on the EQIP contract. The Tribes wanted these willows planted, otherwise would not have signed the contract. I believe that no work should be done on the 2001 demonstration area until further discussions have taken place between the Tribe, BOR and NRCS concerning the plantings that have taken place.

The Bureau of Reclamation (BOR) in public meetings with the Shoshone-Bannock Tribal Council and at an onsite meeting on the riverbank with Tribal employees and Natural Resources Conservation Service (NRCS) said that the design in the draft EA was based on the fact that the flows equivalent to the 1997 flood will happen every few years. In searching the BOR website and finding the flows that occurred in 1997, the peak flows were 41,900 cfs. Statistics show that approximately 43,000 cfs is a 100 year storm event. This shows that these types of flows will not likely occur every few years as stated by BOR personnel. If the BOR used these types of flows in the computer models used for these designs, the data may be misrepresented and should be adjusted to the likely flow that will actually occur every few years.

In 2006, there was bank full flow at the proposed project site (see photos). This high flow, which was 20,230 cfs, is approximately a 5 year storm event, which is likely to occur every few years. During this event, the only bank erosion that occurred at the demonstration site was on the upper

two to three feet of bank. This indicates that the bank is trying to come to its natural angle of repose. The lower four to five feet of bank was stable and didn't erode during the event of 2006. Shortly after the demonstration project was installed in 2001, the Tribal GIS department installed rebar horizontally into the bank to measure the erosion. In 2007, one of the rebar pieces was found during willow planting and there was only about 4-6 inches of rebar protruding out of the bank. The rebar was approximately 3 feet from the top of the bank. This indicates that since 2001, there has only been 4-6 inches of bank that has eroded. Again, this is mainly due to the soil trying to come to its natural angle of repose.

Since the Tribe signed an EQIP contract with the NRCS, they are obligated to fulfill the terms of the contract. If the contract terms are not fulfilled, the Tribe will be obliged to pay a penalty to NRCS. This was discussed in the aforementioned meeting with the Tribal Council. BOR personnel that were at this meeting stated that BOR could reimburse the Tribe for any monetary penalties that NRCS would charge the tribe. This may be a misuse of public funds. All of the agencies I have worked with state that if a person or entity is found out of compliance of any federal, state or local law, that an agency may NOT assist that person or entity in coming into compliance or helping with any damages that may occur to that person or entity. Reimbursing the Tribe for any damages the NRCS assesses may be a violation of federal law in itself. If the BOR wishes to try and reimburse the Tribe, you better consult your national office, lawyers and any other federal agencies that may have oversight on your funding and spending.

Mr. Robert Boyer of BOR has stated in public meetings at Fort Hall that he envisions the proposed preferred alternative being installed in three phases. The first phase would be to rip rap the area below the 2001 demonstration project. I fully agree with this needing completed as soon as possible.

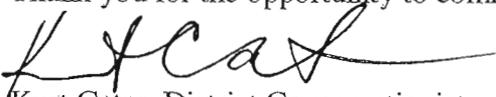
Phase 2 is proposed for the area within the 2001 demonstration project.

Phase 3 is proposed for the area along the river immediately west of the monument. I agree wholeheartedly that this also needs done.

As for phase 2, I believe this money could be better spent where this channel takes off from the main channel upstream. I believe that some stream barbs or some other kind of diversion could be put in place just upstream from where this channel takes off to divert at least some of the water back into the main channel. This would give the area where the channel takes off a chance to start building some bank and keep the water out of this channel and in the main channel.

The area for phase 2, as stated above, is adequately protected with the plants that have come in naturally and those that were planted under the Tribes EQIP contract.

Thank you for the opportunity to comment on this draft EA.


Kurt Cates, District Conservationist
Fort Hall NRCS Office

The following summarized information provides Reclamation's technical responses to a letter from Kurt Cates, District Conservationist, Fort Hall NRCS Office to Robert (Hap) Boyer, Bureau of Reclamation, Burley ID received May 4, 2007 regarding bank stabilization of a meander bend upstream of the Fort Hall National Historic Landmark. This documented in the *Draft: Fort Hall National Historic Landmark Bank Stabilization Analysis of Alternatives – May 2006*. The full reference for this document is presented at the end of this response letter and can be requested hard copy by contacting Mr. Robert Boyer at (208) 678-0461.

Background

The irreplaceable cultural resource of the Fort Hall National Historic Landmark warranted a bank stabilization alternative with a high certainty of success. Tribal concerns imposed the requirement for minimal maintenance. These considerations drove the selection of viable alternatives. Reclamation design accounts for changes in river alignment over time including meander bend migration and compression, both likely processes in this reach. FISRWG (1998) describes the process of evaluating tradeoffs.

2001 Demonstration Site Conditions

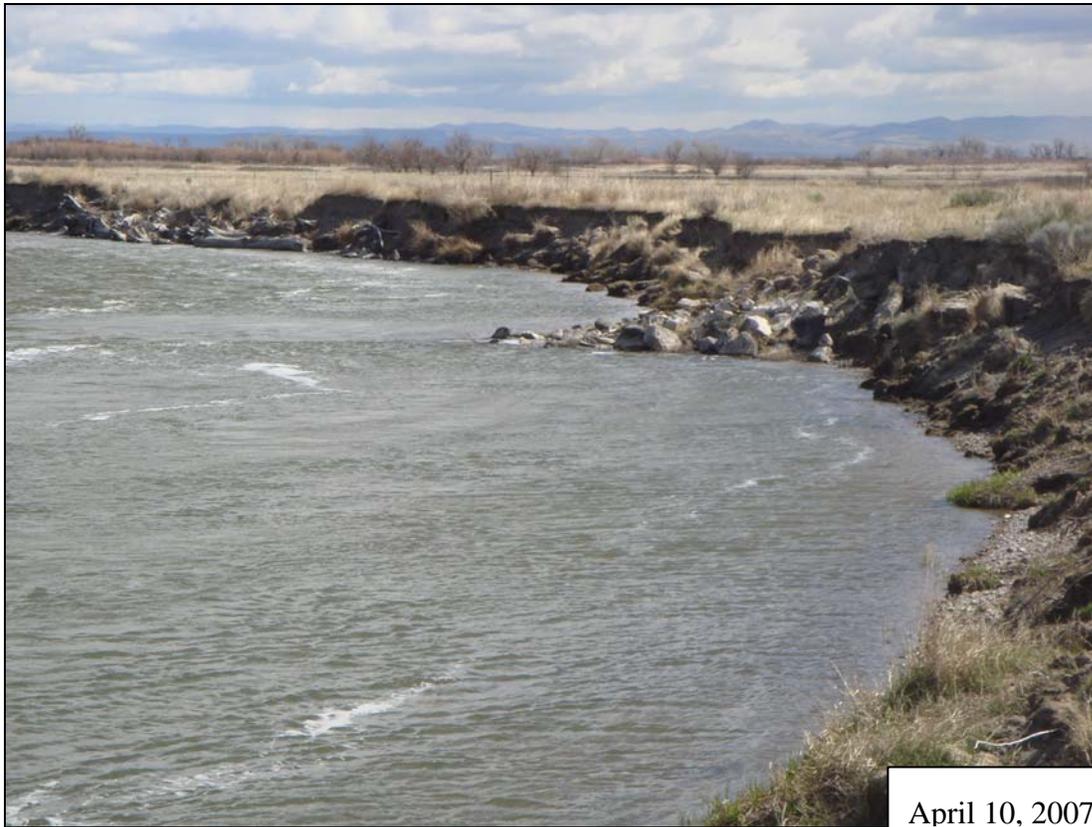
Aerial photography, repeat surveys, and field visits indicate continued migration and bank erosion on the bend of the Snake River, ID upstream of the Fort Hall National Historic Landmark subsequent to the installation of the 2001 demonstration project. The demonstration project failed to halt meander migration. The Fort Hall National Historic Landmark and adjacent upstream lands remain at risk.

Field evaluation of the barbs in both 2004 and 2006 found dislodgement of the constituent rocks at flow events smaller than a 5-year flood. Continued removal of material and a loss of barb effectiveness are expected. Historical aerial photography shows the potential for shifts in approach angle on time scales of less than one decade. A change in approach angle of the river could negate the influence of the barbs even before additional rock removal. The barbs form the key component of the existing bank stabilization. The existing line of protection is discontinuous and lacks toe protection. The loss of flow redirection by the barbs will expose the root wads and recent vegetation to high velocity flows and toe scour. The current damage to the barbs and susceptibility to changing river conditions preclude relying on the 2001 demonstration project for bank protection.

Vegetation

A review of photographs taken on a field visit in April 2007 was unable to identify naturally established willows or cottonwoods providing bank protection at the 2001 demonstration site. The adjacent floodplain also lacks mature trees and dense stands of woody species. Thin

grasses provide little protection against impinging flows. The following photo taken April 10, 2007 illustrates the conditions at the site.



The lack noticeable woody vegetation on photographs 6 years after project installation limits confidence in the sustainability of vegetation densities sufficient to resist erosive forces at this site.

Woody vegetation can effectively slow (but not stop) river migration under conditions with a sufficient water table and where bank heights do not exceed root depths. Performance is highly uncertain. The Fort Hall site includes bank heights exceeding the root depth, a semi-arid climate, and a severe bend with impinging flows and deep toe scour. Over the study period beginning in 1936, the 14 mile reach from Tilden Bridge to American Falls Reservoir shows migration even on vegetated banks. Many of these banks included mature trees and woody stands and would therefore be expected to provide higher erosion resistance than the 2001 site. Protecting the Fort Hall Landmark requires halting erosion. The conditions do not warrant a purely biological solution.

Design Event and Natural Angle of Repose

The selection of the design event is described on Page 11 of Reclamation's *Draft: Fort Hall National Historic Landmark Bank Stabilization Analysis of Alternatives* document (USBR 2006) under the heading "Main Left Channel Existing Conditions". One-dimensional hydraulic modeling indicated the most severe hydraulic conditions occur at a discharge of approximately 10,500 ft³/s. The computer models are documented in the same report. The NRCS hydrology is a reasonable estimate of flood recurrence and consistent with Reclamation analysis.

The conclusion that net erosion in 2006 is merely the bank approaching a natural angle of repose cannot be supported with the evidence provided. Field photography shows block failure mechanisms indicative of an undercut root zone. Natural angles of repose do not typically form under these conditions. Biedenharn et al (1997) describes bank failure processes. Reclamation design considered the field evidence adequate to forgo a more detailed geotechnical evaluation of stability. Reclamation's decision on the 2001 demonstration project considered the long term stability and protection of the bank under potential future conditions of the structures and channel within and around the demonstration site.

Upstream Flow Redirection

A proposal for redirecting flow was presented under the title "Channel Relocation" in the Analysis of Alternatives report and excluded from consideration due to:

- construction costs;
- the presence of cultural resources;
- dynamic planform; and
- unsuitable terrain (Reclamation 2004).

Banks on the outside of migrating bends tend to remain steep and overhanging until passage of a meander bend. Biedenharn et al. (1997) describes typical cross section shapes. No reason has been identified why the river would depart from typical behavior at this site due to a partial diversion of flow. Figure 2-12 of Reclamation (USBR 2006) shows the hydraulic connections between the two flow paths and indicates the difficulty in isolating the channel.

Summary

The 2001 demonstration site shows signs of damage and is unlikely to provide long-term erosion protection under the range of likely future river conditions. Constraints on the planned Reclamation structures require strategies with a high likelihood of success and minimal maintenance. Flanking protection requires modification of the 2001 demonstration site to account for changing river form.

References

- Biedenharn, D.S., Elliot, C.M., and Watson, C.C. (1997). *The WES Stream Investigation and Streambank Stabilization Handbook*. U.S. Army Engineer Waterways Experiment Station (WES), Vicksburg, MS. October.
- FISRWG (1998). *Stream Corridor Restoration Principles, Processes, and Practices*. Federal Interagency Stream Restoration Working Group. October.
- U.S. Department of the Interior. Bureau of Reclamation. 2004. *Draft: Fort Hall Bank Stabilization Conceptual Alternatives, Snake River, ID*. Mooney, D.M. and Baird, D.C., Sedimentation and River Hydraulics Group, Technical Service Center, Bureau of Reclamation, Department of the Interior. Denver, CO. July 6.
- U.S. Department of the Interior. Bureau of Reclamation. 2006. *Draft: Fort Hall National Historic Landmark Bank Stabilization Analysis of Alternatives, Snake River, ID*. Mooney, D.M. and Baird, D.C., Sedimentation and River Hydraulics Group, Technical Service Center, Bureau of Reclamation, Department of the Interior. Denver, CO. May.



United States Department of Agriculture
Natural Resources Conservation Service

Natural Resources Conservation Service
P.O. Box 306
Fort Hall, ID 83203

"A Partner in Conservation Since 1935"

Kurt Cates, District Conservationist
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Email: kurt.cates@id.usda.gov

May 11, 2007

Mr. Robert Boyer, BOR
1359 East Hansen Avenue
Burley, ID 83318-1821

Mr. Boyer,

I am writing this letter in regards to the decisions being made concerning the Snake River above the Fort Hall Monument. I did send in comments concerning the Draft EA but thought a letter to you personally on a couple of items might be in order.

As we have discussed in the past, the Tribe entered into an Environmental Quality Incentive Program (EQIP) contract with the Natural Resources Conservation Service (NRCS) in 2004. Starting in 2006, a group of Tribal students started to plant willows along the upper stretch of river that is within the proposed project area in the draft EA. In 2007, the Tribe completed planting willows and installing fascines along this stretch of river. The work the Tribe completed on the river will complete the terms of this contract. However, in the preferred alternative of the draft EA, the work that has been completed by the Tribe will be torn out, which will be in violation of the EQIP contract. When the Tribe is found in violation of the contract, they will have to pay a penalty for non-compliance with the contract.

In a public meeting with the Tribes, you stated that the Bureau of Reclamation (BOR) could reimburse the Tribe for any penalty or fine that the NRCS levies against them. Before this is promised to the Tribe, you may need to check federal guidelines on use of taxpayer dollars. Is it a violation for one Federal Agency to pay for or reimburse a private entity for a fine or penalty levied by another Federal Agency? As a Federal Employee, I have always been told that this is a violation of federal law. I recommend that you check with the BOR lawyers and your national headquarters before giving the Tribe any money.

Secondly, you stated many times that the Snake River flows during the floods of 1997 will happen every few years and those flows were used by your engineers to determine the best alternative for this stretch of river. In looking at flow charts, the flows of 1997, which peaked at 41,900 cubic feet per second (cfs), are between 50-60 year flow event. This suggests that the flows of 1997 will not likely happen every few years. In 2006, we had near bank full flows on this stretch of river. The peak flows in 2006 were 20, 230 cfs, which is about a 10 year event, which suggests that this flow is more likely to occur every few years. During the 2006 flows, there was very little bank loss on the upper stretch of this portion of the river. If the BOR used the 1997 flows as happening every few years as you have stated, this may be somewhat misleading information for the computer programs used for the design data. I have enclosed the storm event chart, flow data for 1997 and 2006 and photo's I took in 2006.

The Natural Resources Conservation Service provides leadership in a partnership effort to help people
conserve, maintain, and improve our natural resources and environment.

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You stated that you envision the rip rap work will be done in three stages. The first stage would be immediately below the area where the demonstration project was completed in 2001. The demonstration project and the EQIP contract are in the same area. The second stage would be in the area of the 2001 Demo project and the EQIP contract and the third stage would be on the river just west of the Fort Hall Monument site. I agree that the first and third stages need completed as soon as possible. However, I believe that the second stage is unnecessary because of the work that was completed in 2001 and more recently by the Tribes, BOR, BIA and NRCS. The 2001 demonstration project was completed using BOR and BIA funding and NRCS engineering assistance. If the BOR felt that rip rap was needed, this should have been suggested in 2001 instead of wasting the time and money installing the demonstration project. In looking at the left bank of the river since the demonstration project was completed in 2001 and the willows were planted, there has been very little erosion of the bank. The only noticeable erosion is the upper portion of the bank and this is mainly due to the soil trying to get to its natural angle of repose (slope). The lower portion of bank has grasses, forbs and woody shrubs and trees growing on it. These plants along with the structures that were installed in 2001 show to be holding the bank in place and in fact show signs of bank building. The gravel bar at the northern end of this stretch of river has elongated and is also helping to protect this portion of bank.

In looking at the overall picture of this stretch of river, I believe that the money for the second stage would be better utilized in going to the point where this channel departs from the main stream channel and install some structures to deflect a portion of the water back into the main channel, thus decreasing the danger of erosion in this channel. The stream barbs that were installed in 2001 are meant to deflect water away from the bank. Barbs or other structures could be installed to help deflect some of the water away from this channel and back into the main channel. This work could be done after the first and third stages are completed in the monument area. In talking to one of the Tribes Land Use Commissioners, he agrees that this should be done.

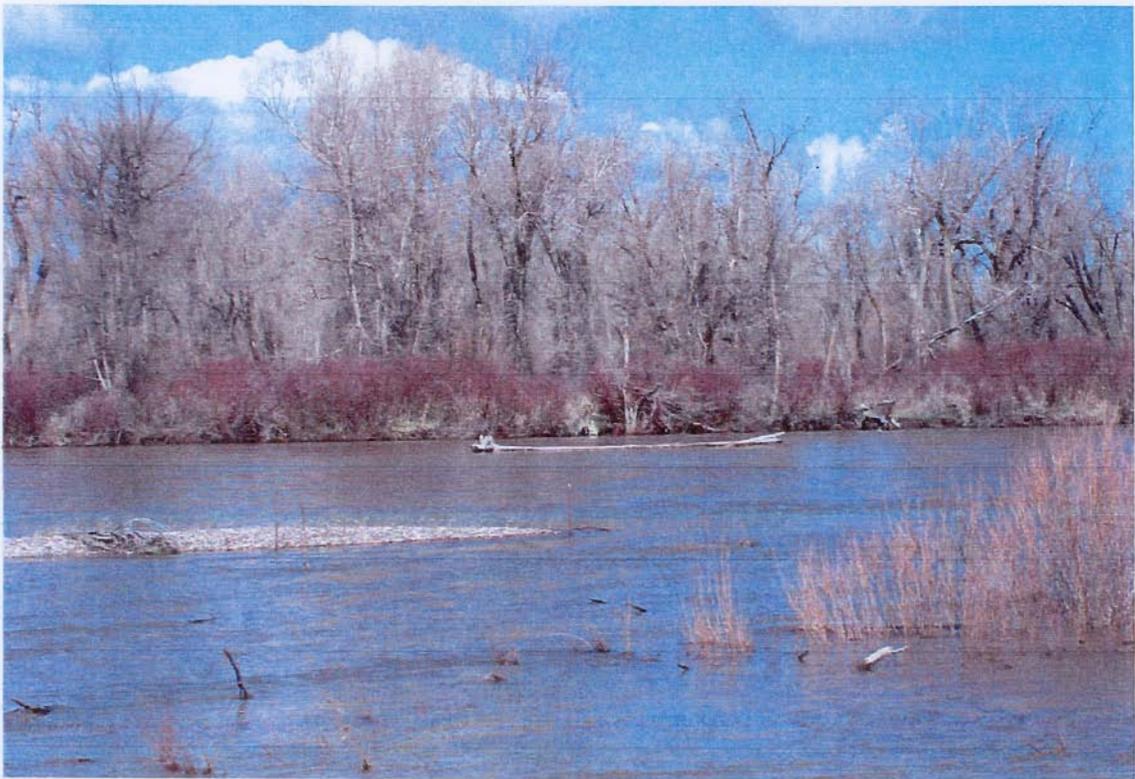
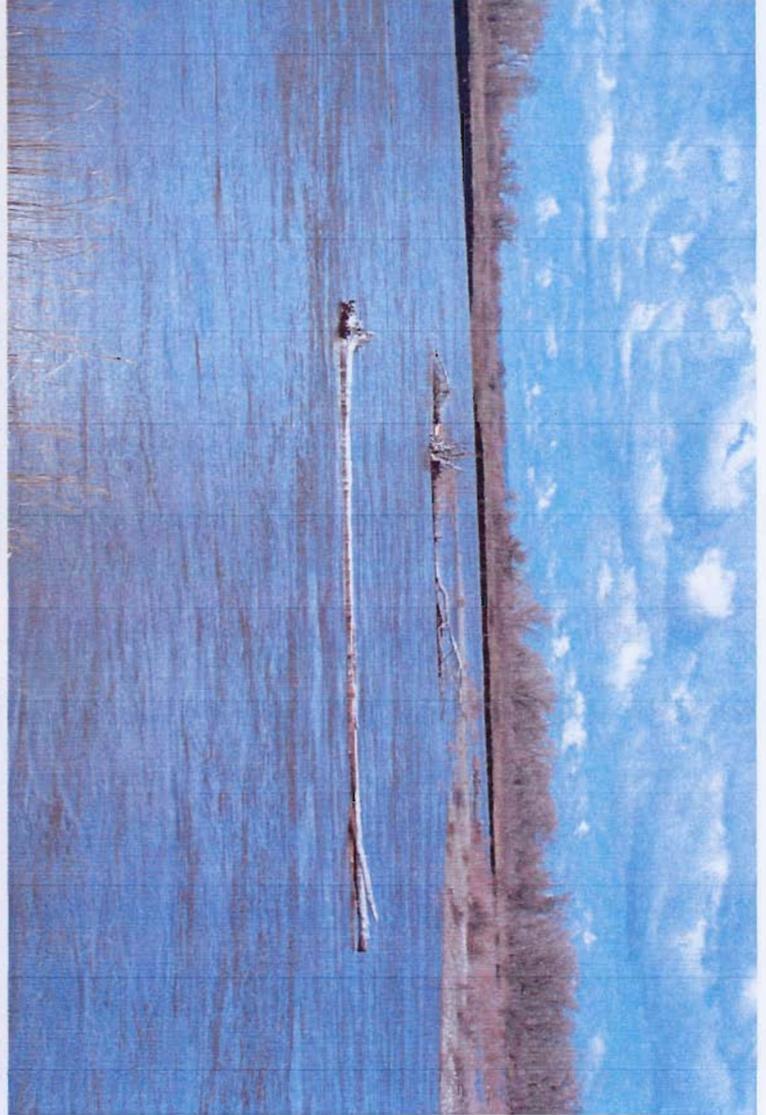
I believe that all parties involved need to sit down and discuss this area more. I would highly recommend completing stages one and three as soon as possible, but waiting on stage two until we can clear up any differences in thought. We may be able to come up with a way to better utilize the money meant for stage two. I look forward to hearing from you and am willing to meet with all parties involved. Please let me know if you have any questions or comments regarding this letter or any other contact we have had in the past.

Sincerely,

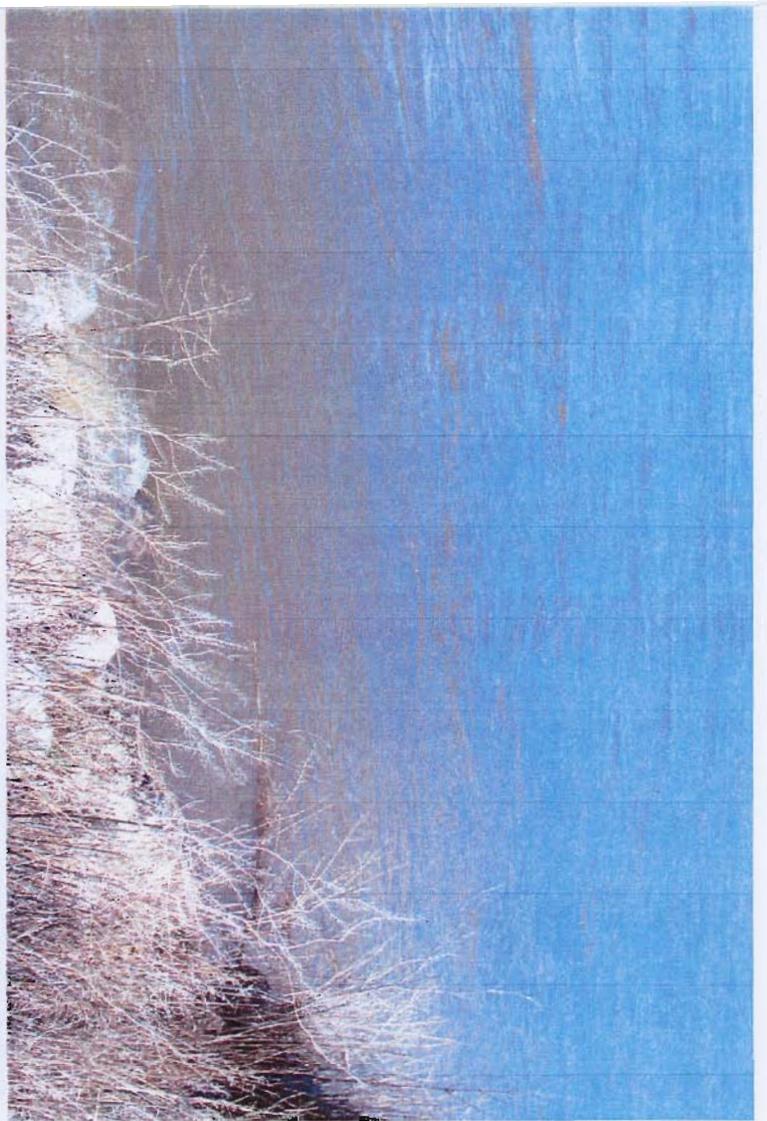
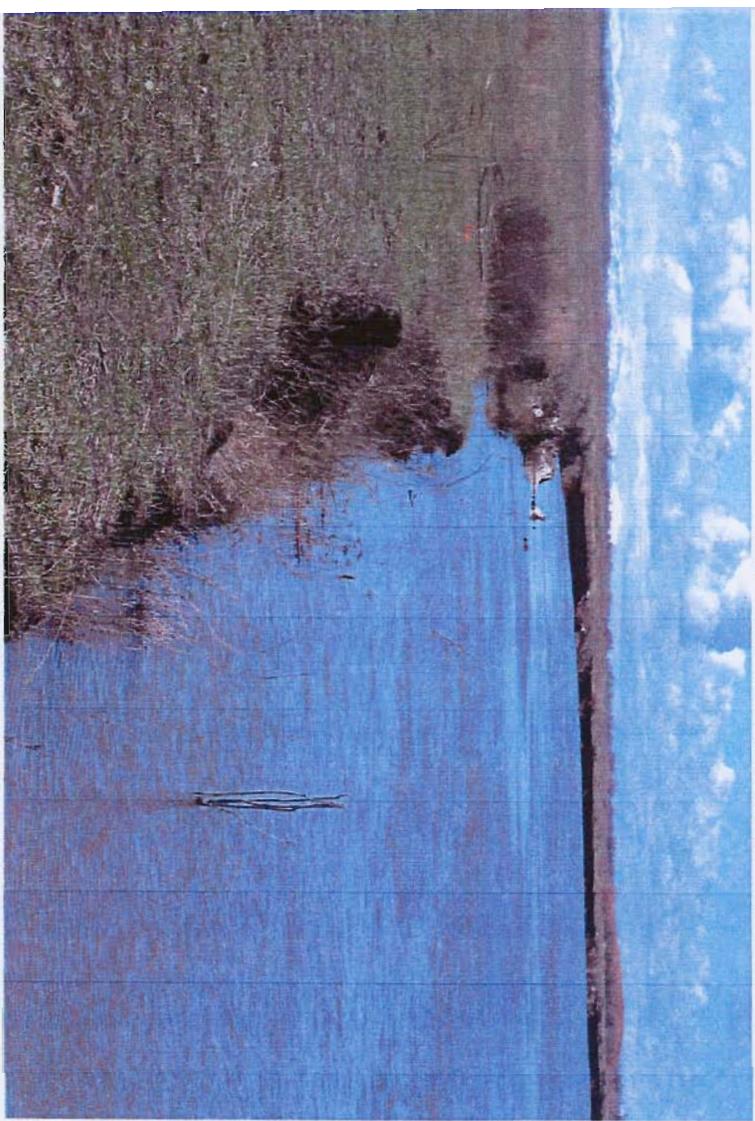


Kurt Cates, District Conservationist
Fort Hall NRCS Office

Cc: Alonzo Coby, Chairman – Shoshone-Bannock Tribes
Don Dixon, Ag. Representative – Senator Mike Crapo
Chris Ketchum, Deputy Area Manager, BOR - Burley



April 2006



April 2006

Search Reclamation

BFTI == Snake River near Blackfoot, ID

Provisional Data - Subject to Change

DATE	QD
06/01/1997	23800.00
06/02/1997	24300.00
06/03/1997	23700.00
06/04/1997	23000.00
06/05/1997	22100.00
06/06/1997	21100.00
06/07/1997	21500.00
06/08/1997	22700.00
06/09/1997	24000.00
06/10/1997	24800.00
06/11/1997	26000.00
06/12/1997	28400.00
06/13/1997	32200.00
06/14/1997	37100.00
06/15/1997	39500.00
06/16/1997	41300.00
06/17/1997	41900.00
06/18/1997	41400.00
06/19/1997	40000.00
06/20/1997	39000.00
06/21/1997	39700.00
06/22/1997	40800.00
06/23/1997	40700.00
06/24/1997	39500.00
06/25/1997	36700.00
06/26/1997	34100.00



06/27/1997	31000.00
06/28/1997	26400.00
06/29/1997	23900.00
06/30/1997	23300.00
07/01/1997	21400.00
07/02/1997	19700.00

Search Reclamation

BFTI == Snake River near Blackfoot, ID

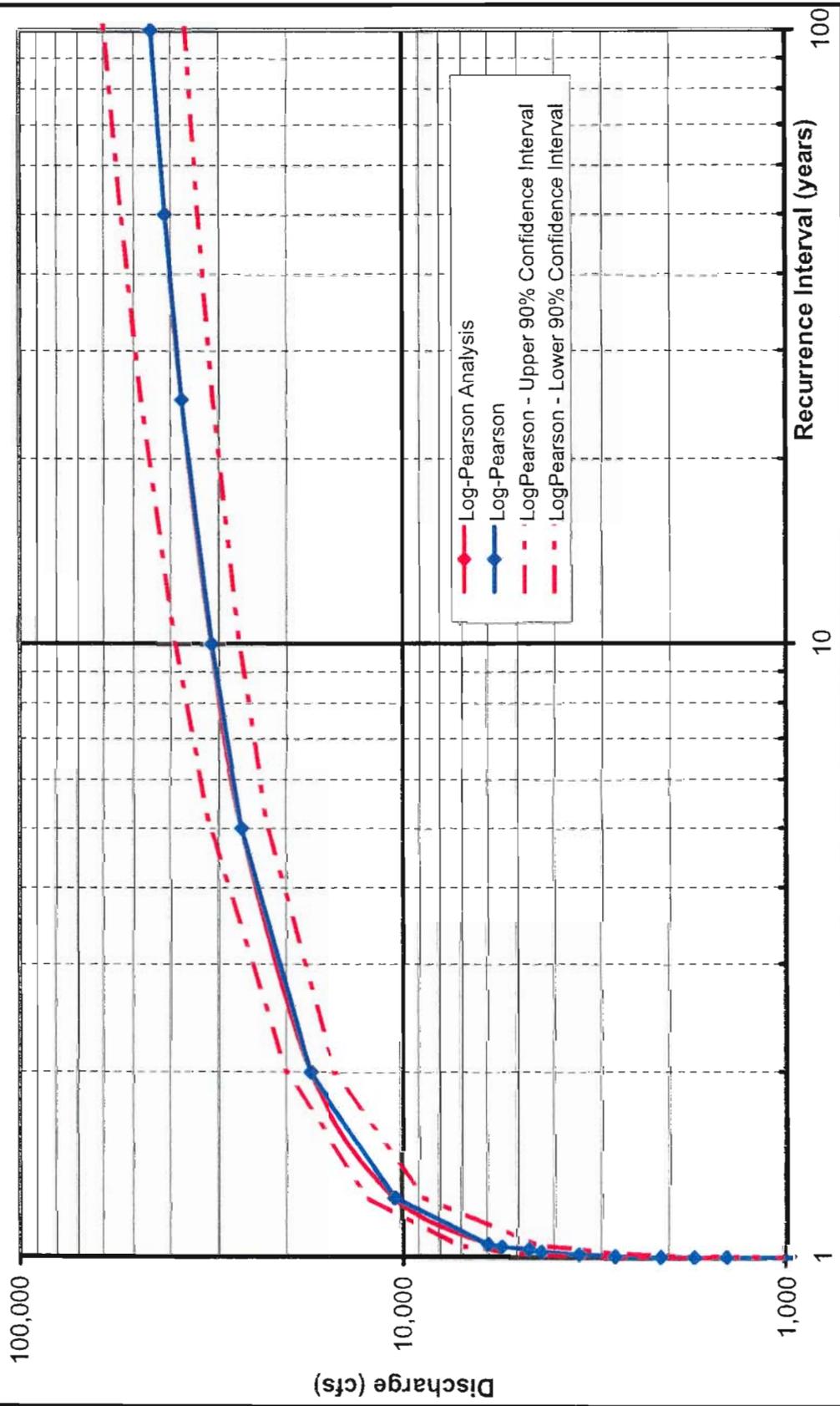
Provisional Data - Subject to Change

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04/02/2006	3722.14
04/03/2006	3840.30
04/04/2006	3718.68
04/05/2006	3669.36
04/06/2006	3746.16
04/07/2006	4251.73
04/08/2006	4803.91
04/09/2006	5822.04
04/10/2006	6605.08
04/11/2006	6962.95
04/12/2006	9760.29
04/13/2006	10615.72
04/14/2006	10870.39
04/15/2006	11190.60
04/16/2006	11748.56
04/17/2006	12599.92
04/18/2006	13560.35
04/19/2006	15498.82
04/20/2006	17267.12
04/21/2006	17423.68
04/22/2006	16923.04
04/23/2006	16634.82
04/24/2006	16954.15
04/25/2006	17305.09
04/26/2006	18048.53

04/27/2006	18260.57
04/28/2006	18313.14
04/29/2006	18502.50
04/30/2006	18769.86
05/01/2006	19321.34
05/02/2006	19799.11
05/03/2006	20230.21
05/04/2006	20217.97
05/05/2006	19473.68
05/06/2006	18261.21
05/07/2006	16692.30
05/08/2006	15397.18
05/09/2006	14822.48
05/10/2006	13207.36
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05/14/2006	8314.67
05/15/2006	7925.51



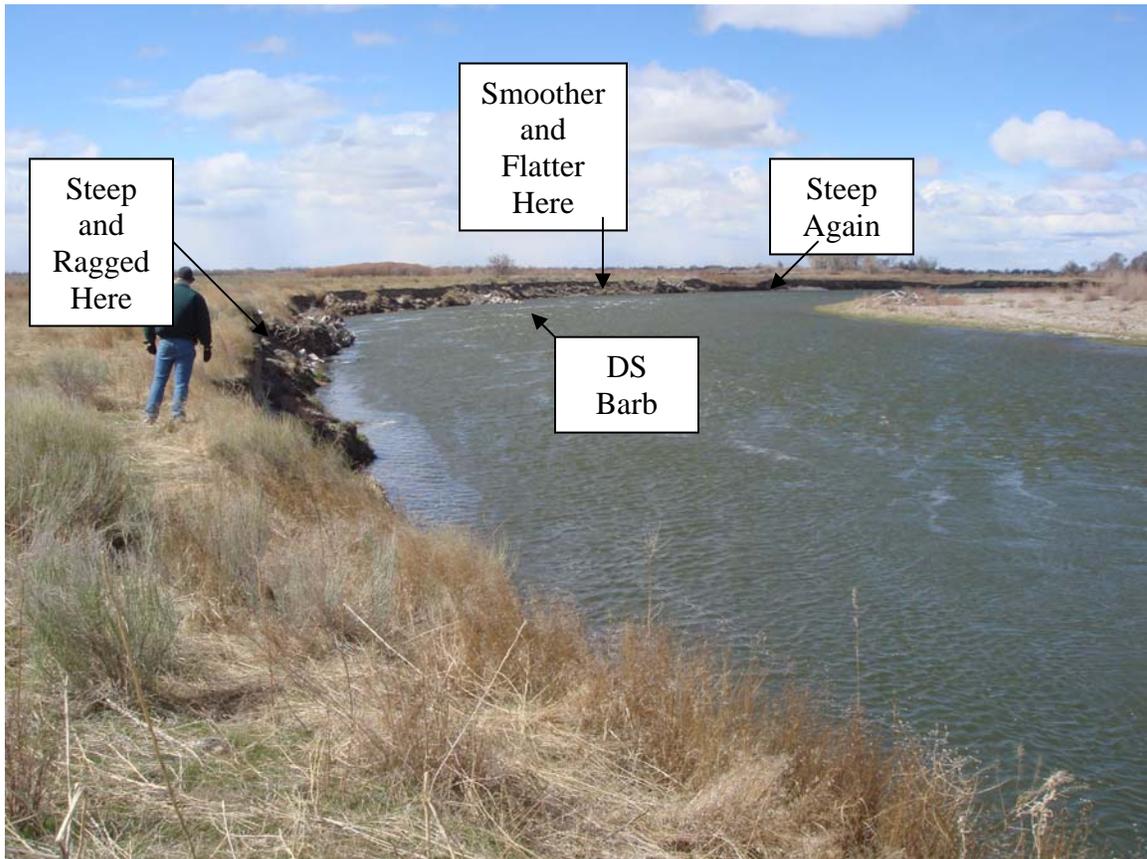
Snake Near Blackfoot
Sampson, 4/07 1959 to 2005



The following summarized information provides Reclamation's TSC analysis of future conditions immediately upstream of the 2001 site in response to NRCS observations on bank building and the elongation of the gravel bar at the north end of the site.

Reclamation's responses are intended to address the comments in the letter from Kurt Cates, District Conservationist, Fort Hall NRCS Office to Mr. Robert Boyer, Bureau of Reclamation, Burley ID received May 11, 2007.

The NRCS photographs, presented as attachments, appear to show slab-type block soil failures as indicated by tension cracks and detached intact blocks as opposed to a smooth transition. The vegetation appears to consist of grasses and forbes, non-woody species that provide little erosion protection. The angle of the vegetation growth and ragged edges suggest the failures occurred recently, likely within a season. Block failures typically occur through undercutting of vegetated banks under conditions of toe scour with impinging or parallel flow (Biedenharn et. al 1997). Failed blocks resting at the toe of the bank will likely wash away during the next high flow event or two. The area immediately adjacent to the downstream barb shows a sloping bank, but the remaining areas appear steep with ragged edges 6 years after installation of the demonstration site. Evidence to support the hypothesis of approaching a natural angle of repose was not identified. The following photograph, taken April 10, 2007, shows the different areas.

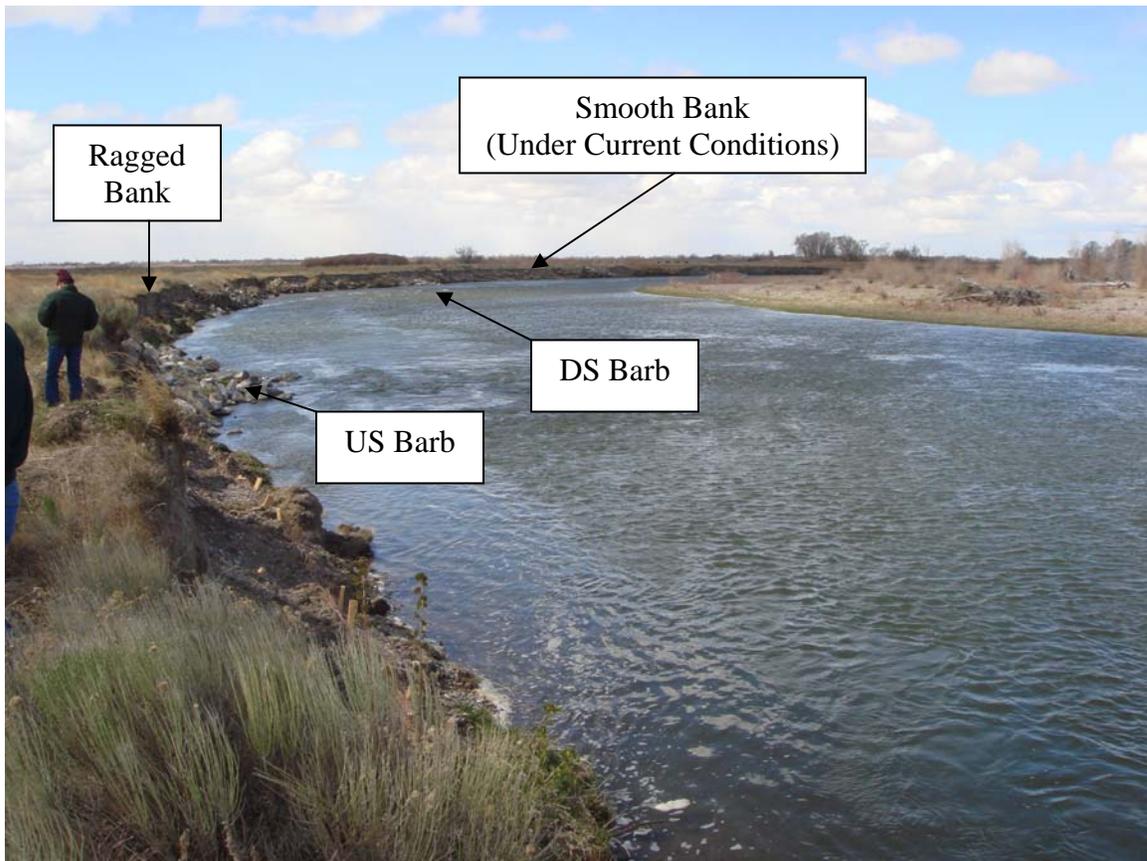


A distinction between the processes of bank building (deposition of material at the toe of a bank and narrowing of the channel) versus point bar growth (meander migration) carries important implications for the future channel conditions. Analysis of upstream planform, meander scars, and banklines from 1936 to 2001 in the 14-miles reach of the Snake River on Fort Hall Reservation Lands shows processes of meander amplification (lateral growth) followed by a cutoff. Longitudinal translation appears minor. Reclamation views the growth of the gravel bar as increasing the threat of erosion as the approach angle grows more severe over time (see photograph below). The 2001 demonstration project contains no provisions to protect against meander evolution and changes to approach angles.



The next field photo illustrates differing performance by the two Fort Hall barbs even though located on the same bend. The extent of the photo includes both of the barbs and the adjacent bank conditions. Banks remain steep and ragged adjacent to the uppermost barb. Barbs function by changing the direction of flow and are not effective when the

river approaches at an angle different than designed for. Growth of the point bar may have changed conditions for the upstream barb. The bank condition of the downstream barb appears smooth and stable, but it is unreasonable to expect static conditions and continued performance over time in this system. Reclamation analysis shows an active planform with approach angles changing at time scales shorter than one decade. The irreplaceable culture resources of this site do not allow for adaptive management and require a design which can accommodate potential changes in conditions. Barbs were considered and rejected in the alternative analysis under the alternate name of “spurs”.



Field photos and aerial photography from 1936 until 2004 and digitized bank lines from 1936 to 2001 on approximately a decadal time scale can be made available to the NRCS for review.

The other technical issues from the NRCS May 11th letter have been in addressed in a previous memo transmitted by email to Mr. Rober “Hap” Boyer on May 15, 2007.

References

Biedenharn, D.S., Elliot, C.M., and Watson, C.C. (1997). *The WES Stream Investigation and Streambank Stabilization Handbook*. U.S. Army Engineer Waterways Experiment Station (WES), Vicksburg, MS. October.

The SHOSHONE-BANNOCK TRIBES

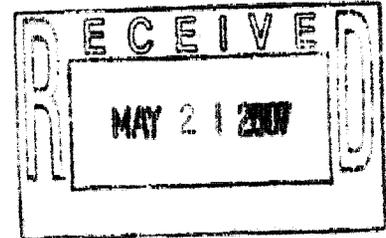
FORT HALL INDIAN RESERVATION
PHONE (208) 478-3700
FAX # (208) 237-0797



FORT HALL BUSINESS COUNCIL
P.O. BOX 306
FORT HALL, IDAHO 83203

May 14, 2007

Bureau of Reclamation
Snake River Area Office
Attn: Mr. Chris Ketchum
1359 Hansen Avenue
Burley, ID 83318-1821



Re: (SRA-6300; ENV-6.00) Shoshone-Bannock Tribes' Comments on the Draft Environmental Assessment Fort Hall National Historic Landmark Bank Stabilization Project Fort Hall Reservation of the Shoshone-Bannock Tribes Upper Snake River Basin, Idaho.

Dear Mr. Ketchum

The Shoshone-Bannock Tribes (Tribes) has received and reviewed the Draft Environmental Assessment (DEA) for the Fort Hall National Historic Landmark Bank Stabilization Project. As stated in our January 29, 2007, letter to the Bureau of Reclamation (BOR), the Tribes remain supportive of the BOR's interest in providing bank stabilization that protects the Landmark and meets the needs of the Tribes.

We would like to reiterate the fact that the Tribes are fully aware that all action alternatives would occur on Tribal lands and that we are supportive of the BOR continuing efforts to address bank stabilization to protect the Landmark. It is recognized that Alternative 1 - No Action, would inevitably lead to the permanent loss of cultural and natural resources at the Landmark site; and, therefore the Tribes would like to initiate protection measures that will provide for long-term management goals and objectives.

The Tribes prefer Alternative 2 - because it provides for the greatest protection of cultural and natural resources and the lowest cost to operate and maintain. It also provides for the least amount of soil evacuation, which is protective of buried cultural resources and native plants. Given the high intensity of historic and pre-contact land use in the Landmark area, the Tribes request limited auger probes for subsurface investigation of buried artifacts and cultural materials.

It is the understanding of the Tribes that operations and maintenance costs will be discussed by the BOR in a separate letter. We await this letter and expect to meet with the BOR regarding its contents. It is also our understanding that the BOR will require a

Resolution from the Fort Hall Business Council prior to any work being to start on Tribal lands. We will have Tribal Natural Resource staff facilitate its development.

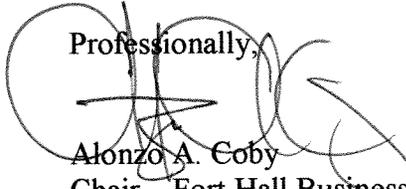
In addition to the cost of operations and maintenance, the Tribes request that the BOR provide funding for monitoring and evaluation of the project. In the DEA, Tribal staff could find no mention of monitoring and evaluation for post-construction either in the Standard Practices or Mitigation Measures sections. The Cumulative Impacts section (3.12) of the DEA, describes the project area as “...*complex, dynamic systems in a continual state of change.*” and, “*Alteration in one portion of the system are going to inevitably result in changes upstream and downstream from that point...*”, the Tribes also hold this concern as we identified in our January 29, 2007, comments.

We request that BOR provide for the development and implementation of a long-term monitoring and evaluation plan and it be included in the Final EA’s sections on Standard Practices and Mitigation Measures.

Furthermore, Section 3.4.3 of the DEA, discusses Options for Maintaining Oxbow Wetlands. The Tribes are supportive of the option that provides for the least amount of risk. As discuss, Option 2 – Porous Riprap Wall appears to provide for a continuous line of bank protection with a reduced risk of erosion to surrounding banks. Although there is uncertainty as to the quantity of water that it will allow to pass through, it is preferred to the high risk and high maintenance options that the DEA identified.

The Tribes appreciate the opportunity to assist the BOR with the development of the Landmark Bank Stabilization Project and look forward to its implementation. For technical and policy assistance regarding this project please contact Yvette Tuell, Environmental Program, 208-239-4552, ytuell@shoshonebannocktribes.com, or Carolyn Smith, Cultural Resources, 478-3707, csmith@shoshonebannocktribes.com, or Claude Broncho, Fish & Wildlife Policy Representative, 239-4563, cbroncho@shoshonebannocktribes.com.

Professionally,



Alonzo A. Coby
Chair – Fort Hall Business Council

Cc: Fort Hall Business Council (7)
Land Use Commission (3)
Claude Broncho, SBT Fish and Wildlife
Chad Colter, SBT Fish and Wildlife
Hunter Osborne, SBT Fish and Wildlife
Dan Christopherson, SBT Fish and Wildlife
Leander Watson, SBT Fish and Wildlife
Arnold Appeney, Land Use
Yvette Tuell, Environmental
Carolyn Smith, Cultural Resources
Elese Teton, Water Resources
Bill Bacon, SBT Attorney

Reclamation's responses to the May 14 2007 comments from the Shoshone-Bannock Tribes

Issue	Reclamation's response	For further information, refer to the Fort Hall National Historic Landmark Bank Stabilization Project Final EA
<p>The Tribes request that BOR provide for the development and funding for long-term monitoring and evaluation of the project.</p>	<p>The proposed project has the potential to perform for many years with little maintenance. However, to ensure that the project components perform as planned, it is of extreme importance that regular monitoring occurs. During the 3 years following project completion, Reclamation recommends joint monitoring and evaluation of the project's performance. This would be accomplished semi-annually, first in the spring and second after irrigation season ends. In the years following this initial 3-year period, monitoring will take place annually.</p> <p>Annual monitoring and evaluation of performance may identify an occasional need to add small amounts of rock or reposition rock that may have moved. In the event that the integrity of the work is compromised or a potential failure of the project would occur, then Reclamation would evaluate and repair the damaged area. Reclamation fully understands that any activity to protect the Landmark by implementation of a stabilization project on tribal lands requires concurrence and permission from the Fort Hall Business Council.</p>	<p>Chapter 3, Section 3.13.</p>