

PART I - ADMINISTRATIVE

Section 1. General administrative information

| | |
|---|---------------------|
| Title of project Lake Billy Shaw Operations and Maintenance and Evaluation (O&M, M&E) | |
| BPA project number | 9501500 |
| Contract renewal date (mm/yyyy) | 2/2000 |
| Multiple actions? (indicate Yes or No) | yes |
| Business name of agency, institution or organization requesting funding Shoshone-Paiute Tribes of the Duck valley Indian Reservation | |
| Business acronym (if appropriate) | Sho-Pai Tribes DVIR |
| Proposal contact person or principal investigator: | |
| Name | Guy Dodson Sr. |
| Mailing address | P.O. Box 219 |
| City, ST Zip | Owyhee Nevada 89832 |
| Phone | 208-759-3246 |
| Fax | 208-759-3248 |
| Email address | dvirfg@aol.com |
| NPPC Program Measure Number(s) which this project addresses 2.1A1, 2.2A, 2.2H, 7.1B, 7.1C, 10.1E1, 10.2A.2, 10.8C2, 10.8C5 | |
| FWS/NMFS Biological Opinion Number(s) which this project addresses FERC relicensing considerations of the Hells Canyon Complex relative to the 1999 FCRPS (Hydropower Operations) Biological Opinion, NMFS | |
| Other planning document references CBFWA-Resident Fish Managers (1997) Multi-year Implementation Plan Federal MOA on BPA Fish and Wildlife restoration funding Department of Energy/BPA Tribal Policy State of Idaho and State of Nevada Fish Management Plans affecting the Owyhee Basin Independent Scientific group (1996) Return to the River/ (1997) Review of Columbia Basin Fish and Wildlife Program NPPC Regional Multispecies Framework Project/Process/Documents Duck Valley Indian Reservation (DVIR) Natural Resources Plan Duck Valley Water Quality Standards (draft) | |
| Short description | |
| Target species | |

Redband trout, introduced trout species (rainbow) trophy fisheries; other resident trout species comprising the native community; anadromous salmonids (reintroduction/off site mitigation; all wildlife species.

Section 2. Sorting and evaluation

| |
|---------------------------|
| Subbasin Owyhee |
|---------------------------|

Evaluation Process Sort

| CBFWA caucus | | CBFWA eval. process | | ISRP project type | |
|----------------------|-----------------|---|---|--------------------------|-------------------------------------|
| X one or more caucus | | If your project fits either of these processes, X one or both | | X one or more categories | |
| | Anadromous fish | | Multi-year (milestone-based evaluation) | | Watershed councils/model watersheds |
| X | Resident Fish | | Watershed project eval. | | Information dissemination |
| | Wildlife | | | X | Operation & maintenance |
| | | | | | New construction |
| | | | | X | Research & monitoring |
| | | | | X | Implementation & mgmt |
| | | | | | Wildlife habitat acquisitions |

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

| Project # | Project title/description |
|-----------|---|
| 20536 | Develop Management Plan & Assess Fish and Wildlife of the Owyhee Basin - DVIR |
| | |
| | |
| | |

Other dependent or critically-related projects

| Project # | Project title/description | Nature of relationship |
|-----------|--|---|
| 8815600 | Stocking Fish in Lakes and streams on the DVIR | Stocking of hatchery trout in reservoirs and streams has been implemented for many years to provide fisheries and |

| | | |
|---------|--|---|
| | | economic benefits to the DVIR — this program needs to be re-evaluated & integrated in the rationale of a comprehensive fish management plan. |
| 9500600 | Shoshone-Bannock-Shoshone-Paiute Joint Culture Facility | A BPA funded fish culture facility is being developed to provide trout production to supplement fisheries on the DVIR and Fort Hall. Its operation should be coordinated with the comprehensive Owyhee Basin resident fish management plan. |
| 9701100 | Enhance and Protect Habitat & Riparian Areas on the DVIR | Habitat enhancement is a critical need for Lake Billy Shaw. This is a new reservoir and must be protected and enhanced to provide for the trophy fishery. |

Section 4. Objectives, tasks and schedules

Past accomplishments

| Year | Accomplishment | Met biological objectives? |
|------|---|----------------------------|
| 1999 | Fenced approximately 6 miles of reservoir | NA |
| 1999 | Planted native trees and willows | yes |
| 1999 | Fish screens checked and maintained | |
| 1999 | O&M plan followed and information recorded (water quality, riparian growth/disturbance) | |
| 1999 | Dam monitoring wells checked and information recorded during filling | |

Objectives and tasks

| Obj 1,2,3 | Objective | Task a,b,c | Task |
|-----------|---|------------|---|
| 1 | Protect shoreline from degradation | a | Fence 8 Miles of shoreline |
| | | b | Plant native trees along shoreline |
| 2 | Information dissemination | a | Erect informational signs |
| | | b | Monthly articles/updates in Sho-Pai news/Idaho Statesman |
| 3 | Work with Owyhee Schools Environmental Club | a | Students help in water quality monitoring & evaluation |
| | | b | Students aid biologist and staff in fishery surveys/ creel census |

| Obj 1,2,3 | Objective | Task a,b,c | Task |
|----------------------|--|-----------------------|--|
| 4 | Operations and Maintenance of screens and dam structures | a | Follow O&M, M&E plan for Lake Billy Shaw |

Objective schedules and costs

| Obj # | Start date mm/yyyy | End date mm/yyyy | Measureable biological objective(s) | Milestone | FY2000 Cost % |
|--------------|-------------------------------|-----------------------------|---|--|----------------------|
| 1 | 03/2000 | 03/2001 | | yes - completed fence | 35% |
| 2 | 02/2000 | 02/2001 | | yes- completed and erected signs | 15% |
| 3 | 02/2000 | 02/2001 | | school involvement in environmental issues/fisheries | 0% |
| 4 | 02/2000 | 02/2001 | yes - water quality data and dam safety records | | 50% |
| | | | | Total | 100% |

| |
|--|
| Schedule constraints ESA listings, weather conditions, water year, |
| Completion date 2010, or when anadromous fish return to Owyhee River |

Section 5. Budget

| | |
|---|--------------|
| FY99 project budget (BPA obligated): | \$215,000.00 |
|---|--------------|

FY2000 budget by line item

| Item | Note | % of total | FY2000 (\$) |
|---|--|-------------------|--------------------|
| Personnel | 1 FTE, 2 part-time, 0.1FTE (administration) | | \$70,000 |
| Fringe benefits | @30% included in personnel | | |
| Supplies, materials, non-expendable property | fencing, rental equipment, trees, seed, sign materials | | \$80,000 |
| Operations & maintenance | Vehicle lease, gas, maintenance, ins. | | \$25,000 |
| Capital acquisitions or improvements (e.g. land, buildings, major equip.) | | | |

| | | | |
|-----------------------------------|------------|--|---------------------|
| NEPA costs | | | |
| Construction-related support | | | |
| PIT tags | # of tags: | | |
| Travel | | | |
| Indirect costs | @ 26.6% | | \$46,550.00 |
| Subcontractor | | | |
| Other | | | |
| TOTAL BPA REQUESTED BUDGET | | | \$221,550.00 |

Cost sharing

| Organization | Item or service provided | % total project cost (incl. BPA) | Amount (\$) |
|---|--------------------------|----------------------------------|-------------|
| | See umbrella project | | |
| | | | |
| | | | |
| Total project cost (including BPA portion) | | | |

Outyear costs

| | FY2001 | FY02 | FY03 | FY04 |
|---------------------|--------------|--------------|--------------|--------------|
| Total budget | \$221,550.00 | \$221,550.00 | \$221,550.00 | \$221,550.00 |

Section 6. References

| Watershed? | Reference |
|------------|---------------------------------------|
| | see umbrella proposal (ShopaiGD1.doc) |
| | |
| | |

PART II - NARRATIVE

Section 7. Abstract

An overall description of *technical and scientific background* for the comprehensive fish and wildlife enhancement on the duck Valley Indian Reservation is provided in the “umbrella” proposal form - ShopaiGD1.doc The additional specific information relating the Lake Billy Shaw O&M sub-proposal follows.

The purpose of this Operation and Maintenance (O&M) project is to enhance and develop the Billy Shaw fishery area as a trophy catch and release fishery. The O&M will include maintaining the area as a high quality camping and fishing area in the West.

Interpretive signs will be updated and maintained to instruct anglers and campers of regulations. Native trees and shrubs will be planted along the riparian areas of the tributary streams and shoreline of the lake to help ensure water quality is sufficient for trout survival and reproduction. Part of our vision for Lake Billy Shaw is that the lake will become a self supporting fishery with the trout spawning in the streams feeding the lake with minimal human impact. Maintenance will be needed on these streams and feeder canal to protect them from degradation and maintain high water quality. Fish screens will also be maintained to prevent entrance of non-game fish into the new lake as well as monitoring screens in the spillway to prevent escapement. Water quality of the lake and streams will be measured throughout the year. Existing habitat in the area and newly planted trees/grasses will be monitored and evaluated throughout the year.

Section 8. Project description

a. Technical and/or scientific background

The Duck Valley Indian Reservation is located in Idaho and Nevada. The Owyhee River enters the Reservation at the southeast corner in Nevada and exits in the northwest corner of the reservation in Idaho, continuing into Oregon where it enters the snake river. The surface water resources of the reservation consists of the Owyhee river, two man-made lakes, over 350 miles of tributary streams and the Billy Shaw wetlands fishery completed in the fall of 1998.

The Billy Shaw Wetlands fishery project for the Duck Valley Indian Reservation is part of an on-going project which began in 1995 and was funded by Bonneville Power Administration as substitution for the loss of resident fish habitat due to the construction of federal and non-federal hydroelectric dams on the Columbia and Snake Rivers. These dams resulted in the complete abolishment of anadromous fish and greatly disturbed the habitat for native resident fish in the Owyhee River and its tributaries on the Reservation. The loss adversely impacted our tribal treaty rights and natural resources, as well as negatively impacting our subsistence social, cultural, and economic resources on the Duck Valley Indian reservation.

The operation and maintenance of this new fishery will be intensive for the first three years. It will encompass fencing of the lake to exclude domestic livestock from entering the water and degrading the riparian area around the lake. This fence will require yearly maintenance (repairs to wire and posts) to ensure it serves its purpose. The area around the lake will need to be (monitored) to prevent pollution from entering the water and streams. Fencing has been completed on approximately six miles of the shoreline. We propose to complete another 8 miles in 2000. This project also encompasses planting native trees and vegetation along the shorelines of the lake as well as the feeder canal and any tributary streams to the lake. Part of this planting will include monitoring the growth from 1999 and protecting new areas around the lake. Our vision for the future of this lake is to have a self-sustaining fishery with fish from the lake reproducing in both the feeder canal and the tributary streams. This will be accomplished and designed around engineered habitat to stimulate natural stream spawning. Fish introduced to Lake Billy Shaw to produce naturally spawning populations will be similar to species that once inhabited the waters of the DVIR. An operation and maintenance plan (Monitoring and Evaluation included) is already in place with data included in annual reports to BPA. Part of the M&E includes working with the Owyhee Schools Environmental Club to help monitoring water

quality and complete fishery surveys. Fish screens will continue to be maintained to keep the non-game fish from the Owyhee River out of the new Lake Billy Shaw and keep fish in the reservoir from escaping.

b. Rationale and significance to Regional Programs

An overall description of *rationale and significance to regional programs* is provided in the “umbrella” proposal form - ShopaiGD1.doc.

2.1A1: Explore methods to assess trends in ecosystem health.

2.2A: Support native species in native habitats.

2.2H: The need to learn from implementation (M&E)

7.1B: Conserve genetic diversity

7.1C: Collection of population status, life history and other data on wild and naturally spawning populations

10.1E1: Implementation of identified resident fish projects by 2006

10.2A.2 Address potential impacts on resident fish, where such impacts exist, in developing basinwide guidelines to minimize genetic and ecological impacts of hatchery fish on wild and naturally spawning species as called for in measure 7.2A.1

10.8C.2 Review DVIR surface water and groundwater suitability for resident fish production facilities. Initiate a comprehensive genetic sampling program of the redband trout in the Owyhee Basin. Based on results of these studies, develop and implement strategies to protect wild redband trout populations from potential impacts caused by hatchery programs.

c. Relationships to other projects

An overall description of *relationships to other projects* is provided in the “umbrella” proposal form - ShopaiGD1.doc. The following BPA-funded projects are on-going during FY1999-2000 for resident fish mitigation and enhancement on the DVIR. Relationships of these ongoing projects with the proposed Habitat Enhancement project sub-proposal are summarized in the following section.

Project 8815600 “Stocking fish in lakes and streams on the DVIR” [NPPC measure 10.8C1, 10.8C3] Trout stocking in the reservoirs and streams on the DVIR has been ongoing since 1988 and is required to provide partial mitigation for lost fish production and harvest for Tribal sustenance and income. We need to balance the needs of fishing opportunities for Tribal members and economic development on the DVIR, while maintaining genetic diversity of native trout populations.

Project 9500600 “Shoshone-Bannock/Shoshone-Paiute Joint Culture Facility” [NPPC measure 10.8C3, 10.8C6] A BPA funded fish culture facility is being developed to provide trout production to supplement fisheries on the DVIR and Fort Hall Reservations. Its operation should be coordinated with the comprehensive Owyhee Basin resident fish plan and the DVIR Unified Watershed Assessment. Including Lake Billy Shaw fishery development and conservation of

genetic diversity of native trout populations.

Project 970110 “Enhance and Protect Habitat and Riparian Areas on the DVIR” [NPPC measure 10.8C.5] Our habitat project is essential in protecting critical areas of streams and lakes on the DVIR. This project will encompass work on the streams near Lake Billy Shaw as well as the Lake and feeder canal. This project is intended to provide spawning areas and habitat for the fish and wildlife on the DVIR.

d. Project history (for ongoing projects)

Project Reports - Annual Reports submitted to BPA

Years Underway - Project began in 1995 (5 years)

Past Costs - Approximately \$700,000.00 (excluding construction costs)

Major Results-

The Billy Shaw Wetlands project was initiated in 1995 with money being made available for a feasibility study of the Billy Shaw slough area as a trophy fishery. This feasibility study was completed in April of 1996 by Kleinfelder Inc, (Boise, ID). The study determined and quantified that it would be feasible to construct a man-made lake at this location on the reservation and that it would become a trophy fishery. The Northwest Power Planning Council approved funding for construction of this fishery in August of 1996 and the final engineering design began in September of 1997 and was completed in March of 1998.

Construction began in April of 1998 and was completed in the fall of 1998. Work completed in 1999 included the initial filling of the lake along with the beginning of our Monitoring and Evaluation. We also began fencing the shoreline of the lake with approximately six miles of fence completed. Native trees have been planted along the shoreline of the lake as well as willows and shrubs along the feeder canal and tributary streams.

e. Proposal objectives

The overall goal of the Shoshone-Paiute Tribes “umbrella” (refer ShopaiGD1.doc) is to coordinate comprehensive Fish, Wildlife, and Habitat Restoration/protection Plan for the DVIR — including fish and wildlife management planning, fish stock assessment, and wildlife inventory of the Owyhee Basin, DVIR component. The specific objectives of this proposal are:

Objective 1 Protect shoreline habitat from degradation

In order to accomplish this objective we propose to continue fencing more of the shoreline on Lake Billy Shaw. Currently we have six miles of shoreline fenced to prevent entrance of cattle and wild game. We envision have the whole lake fenced to prevent any deterioration of shoreline habitat that is used by wildlife and help maintain good water quality and cooler water temperatures in the summer. The expected outcome is that this Lake will provide an excellent fishery with cool, clear, water and an esthetically pleasing atmosphere. Another part of this objective is to continue work performed in 1999 of planting native trees and willows along the

shoreline of Lake Billy Shaw. This objective began in 1999 with early estimates of 90% survival of trees planted. This work will continue in 2000 with trees being planted on the east and south shoreline as well as along the feeder canal.

Objective 2. Information dissemination

In 1999 we began to erect informational signs at Lake Billy Shaw to inform visitors of our goals and intentions for the newly created lake. The feedback we received from this Lake and our other reservoirs is that there needs to be more signs and information posted as to fishing regulations, camping facilities, emergency information, local attractions and natural wonders, and information on who funded the lake and how it was built and designed. We feel this will help in promote awareness of BPA projects in the region, and inform people on the wonders of the DVIR. Also as part of this objective we plan to present monthly articles to our local newspaper and the Idaho Statesmen (Boise paper) on our progress and events happening at the new reservoir. We feel this will help people become more aware of our part of the Columbia Basin and what part the DVIR plays in the big picture, the intention is to attract more visitors to the DVIR and make people more aware of the Indian traditions as well as BPA's commitment to the Indians in the Columbia Basin.

Objective 3. Work With Owyhee Schools Environmental Club

This objective has no costs associated with it but it is essential to get the youth of the DVIR involved in the environment on the Reservation and elsewhere in the Basin. Our goal is to have students in the club help the biologist and staff perform the monitorig of the water quality and help in fishery surveys (gill netting etc). We began this work in 1998 with summer youth workers helping the biologist collect data on streams on the DVIR. Many students were excited to continue this type of work. Our hope is to expand the work that they are able to perform and possibly get some students involved in fisheries/environment as a career choice.

Objective 4. Operations and Maintenance

This Objective is to follow the O&M and M&E plan that has been inplace since 1998. This plan was developed with the cooperation of the Shoshone-Paiute Tribes and the US Bureau of Reclamation PN Region. This plan includes both the maintenance of the dam structures (valves, monitoring wells) and the fish screens.

This plan has been in effect since the filling began in1999. All data collected and observations are included in the 1999 Annual Report to BPA. Also, this plan includes Monitoring and Evaluation of the water and (when stocked) fish in the Lake. This plan is included in the methods section of this proposal form.

f. Methods

Task 1.1

Fence approximately 8 miles of shoreline

Task 1.2

Plant native trees and willows along shoreline and streams (intermittant) feeding lake

Task 2.1

Erect informational signs at Lake - continuation of work in 1999

Task 2.1

Submit monthly updates and articles to Sho-Pai news and Idaho Statesmen

Task 3.1

Work with Owyhee School Environmental Club in initiating M&E and O&M plan.
Work with Environmental Club in initiating a creel survey and aid in gill netting once fish are stocked.

Task 4.1

Follow M&E and O&M plan designed by Tribes and BOR

LAKE BILLY SHAW

Habitat, Parks, Fish and Game
Duck Valley Indian Reservation
Operation & Maintenance
1998-2007

The Lake Billy Shaw Reservoir in Billy Shaw Slough was completed in fall of 1998. The following is a maintenance, operations, and evaluation schedule for the dam and reservoir. Upon completion of the construction of the dam, the Habitat, Parks, Fish and Game (HPFG) Department will implement the construction of an enclosure fence surrounding the reservoir. This will exclude domestic stock from the campgrounds and riparian areas surrounding the Lake.

The following is a time schedule and management goals for the reservoir:

Spring 1999:

- Establish pre-project riparian/shoreline photo points
- Begin enclosure fences of the reservoir and camp areas (miles to be determined later)
- Planting of trees and native grasses on the shores of the reservoir, stream banks (spillway), and sites disturbed by construction
- Monthly inspection of the dam to check for seepage or other adverse conditions
- Begin year around water quality measurements of reservoir and streams
- Monitor fish screens for any needed maintenance

Spring 2000

- Begin monitoring and evaluation of riparian areas for growth of new vegetation and any disturbance
- Continue inspection of the dam
- Continue water quality monitoring
- Initial stocking of fish in the reservoir (2000-2001)
- Continue fish screen monitoring

2001-2007

- Continue M&E of riparian areas for disturbance and regrowth
- Continue inspection of dam and structures associated with the dam
- Continue water quality monitoring
- Continue fish screen monitoring
- Begin/continue fish health and quality survey, creel survey

The monitoring and evaluation will continue annually with any maintenance work on the riparian areas, dam, or screens being done as needed. The fishery survey will begin in 2001 and continue biannually with the creel survey being done as time permits throughout the year. To monitor seasonal and long-term trends, water quality monitoring will be done year around, including under ice winter sampling.

We are also implementing an Emergency Action Plan (EAP) for the Billy Shaw Dam. This plan will notify everyone downstream of the dam should there be an emergency once the dam is constructed. This plan will coordinate with individuals living downstream of the dam, and with other agencies potentially impacted or having jurisdiction downstream, in order to prepare for any type of disaster, both natural or man-made. The plan should be complete by the end of 1998. This plan will be developed in accordance with State of Nevada standards and criteria.

Full Time Employee

Lease/rental vehicle

Operations/Maintenance vehicle

DUTIES:

Cleaning of fish screens:

- Canal turnout structure
- Billy Shaw feed canal

Removing debris from:

- Outlet works & spillway
- Dam face and dike

Exercising valves once every two months

Instrumentation readings (depth, temp,)

Visual search of dam once/month for excess seepage or unusual conditions

Fencing of Lake Billy Shaw shoreline

Maintenance of fence

Informational signs

g. Facilities and equipment

Refer to the “umbrella project” (ShopaiGD1.doc) for a description of *facilities and equipment*.

h. Budget

This proposal is designed as a sub-proposal under the Shoshone-Paiute Tribes “umbrella project” for BPA funded fish and wildlife implementation projects on the DVIR. The personnel category is for one full-time project manager and two part-time seasonal employees to help complete fence work.

The supplies category is to purchase fencing materials to construct more fence around the shoreline. We also plan to continue planting native trees and grasses around the lake and streams. Rental equipment will be purchased to complete these projects.

The O&M category is for the continued lease of a four-wheel drive vehicle, gas, milage and maintenance.

The indirect category is based on 26.6% of total project cost.

Section 9. Key personnel

Refer to the “umbrella project” (ShopaiGD1.doc) for resumes of *key personnel*. The following Sho-Pai staff and consultants will be implementing this specific sub-proposal.

Section 10. Information/technology transfer

Refer to “umbrella project” (ShopaiGD1.doc) for a description of proposed *information and technology transfer* media methods.

Congratulations!