

Project # 32001

Evaluate the Feasibility of Artificial Production Facility - DVIR

Response to ISRP Preliminary Review FY-03 Proposals (ISRP 2002-02)

The status of redband trout (distribution and abundance) is not yet known.

This is a true statement, as data is currently being analyzed and results from the laboratory are not yet returned to the Tribes. However, one thing the feasibility study will determine is if the trout (either redband or rainbow) are in sufficient numbers for brood stock. However, regardless of the fact of genetic purity, a feasibility study needs to be conducted to determine other aspects, including future funding, possible production of redband trout, production of domestic rainbow trout, production requirement for our fishery, cultural relationships, employment, and the social aspects of a facility, and finally a cost-benefit analysis will be one of the results of the feasibility study.

Preliminary results will be complete in the summer of 2002 from 10 streams sampled on the DVIR. The Tribes are awaiting results from Hagerman on the 4 streams sampled in summer/fall 2001.

We are proposing to expedite Project 2000079 in FY-03 and initiate the studies in the fall 2002. With completion set for one year with results being presented within 4 months of completion of field- work. Results will be complete during the initial phases of the feasibility study. This will insure size, location, brood - stock source (ie. redband, rainbow, sterile rainbow) and production requirements are adequate for the needs of the Duck Valley Reservation.

The difficulties of bringing native wild trout into medium – to – large - scale aquaculture, are technically challenging, as the rearing conditions and diets developed for semi-domesticated stocks of rainbow trout are often not adequate for wild redband or cutthroat. The proposal does not adequately address these potential difficulties.

The difficulties associated with culturing wild stocks are redband are challenging, and we realize this fact. We are proposing to hire a qualified researcher to oversee the culture of these species (if in fact they are present on the DVIR). However, between now and the time we begin culture of these fish we anticipate that the science will have increased to a level where this type of culture will be occurring around the desert west.

We also are working closely with the College of Southern Idaho to learn new fish culture techniques and keep abreast of the latest science. In talking with scientist it appears that culture of redband would not be much different than the culture of cutthroat, which is being done with great success by many states. The diets are similar to those of other salmonids (Chinook, steelhead). One possibility is to experiment with different food types such as a soft moist pellet vs. the extruded floating pellets used in most domestic rainbow trout culture (Terry Patterson - CSI, personal communication 3/11/02). The salmon diet is more palatable and has higher levels of vitamin fortification vs. the standard trout diet. Another partner we have been in contact with is Rangen Fish Feed Division in Burley, ID. Rangen is a local supplier of fish feed to numerous facilities in

the Northwest (David Brock personal communication 3/11/02) and is willing to work with the Tribes on diets and various types of feed for out facility. Oregon Department of Fish and Wildlife are currently culturing redband trout with stock from the Klamath Basin and beginning to experiment with stocks from South and Eastern Oregon (personal communication with Ken Curns 3/12/02).

In talking with six different individuals all who are experts in their field and are aware of redband culture, (and experimented in their culture) all seemed to think raising redband similar to salmon would be no problem.

The requested information on diets and rearing conditions will be information that will be developed or brought out in the feasibility study.

A cost-benefit analysis should be employed to shed additional insight into the need and justification for the facility and proposed program.

A cost-benefit analysis will be one of the products that will result from the feasibility study. The feasibility study will first determine if the resources are available on the DVIR for such a facility. As discussed in the proposal, the feasibility will look at the economic viability, the natural resource availability, (ie. water, land) and the cultural aspects of a supplementation facility on the DVIR. There are two aspect to a feasibility study 1: purely the financial aspects 2: other aspects including future funding, possible production of redband trout, production of domestic rainbow trout, production requirement for our fishery, cultural relationships, employment, and the social aspects of a facility, and finally a cost-benefit analysis will be one of the results of the feasibility study.

Numerous commercial aquaculture operations exist along the Snake River near Hagerman, Idaho, from which rainbow trout could likely be obtained.

There are currently only two (2) commercial aquaculture facilities in the Upper Snake River Basin that has “certified” disease free rainbow trout available. We have heard that one other facility is attempting to receive their “certification” for disease free fish sometime in 2002. Also, in producing our own fish we would eliminate much of the disease concern (IHNV) associated with many of the Snake River aquaculture facilities. The Shoshone-Paiute Tribes have been stocking certified disease free fish in their reservoirs in order to prevent any disease from appearing in the Upper East Fork Owyhee and Bruneau River subbasins. The Tribes intent is to continue this practice either through certified aquaculture facilities or through our own facility. Upon initial production of our facility we will obtain a certified disease free certification.

We would be using local brood stock sources from streams within the Owyhee/Bruneau subbasin.