Study No. 3: TAILRACE BARRIER (PAS Section 2.0 PROJECT DESCRIPTION)

3.1 Project Nexus and Study Description

FWS Proposal:

The proposed project design does not include a tailrace barrier to prevent adult steelhead, spring chinook, bull trout, redband trout, or other species from entering the project tailrace. We request that the Applicant conduct a desktop evaluation of possible injury and mortality to adult salmonids that may attempt to move up through the project tailrace and encounter the project turbine. The study should use data from the full range of possible hydropower flow releases, possible hydropower facility installed capacities, fish species, and swimming speeds.

OID Response:

OID agrees to conduct a desk top study to address this topic or design a physical barrier to prevent steelhead and salmon from entering the tailrace.

3.2 Resource Issues/Goals and Objectives

FWS Proposal:

Adult steelhead, spring chinook, and redband trout are already present in the Crooked River downstream of Bowman Dam. We also expect that adult bull trout will move upstream using the newly constructed Opal Springs Hydro Project fish ladder. These species may have burst speed sufficient to move up through the Project tailrace and encounter the project turbine. Our goal is to avoid any injury or mortality to fish that could attempt to move upstream through the project tailrace.

OID Response:

OID understands and supports the resource management goals.

3.3 Justification of Recommended Study Methodology

FWS Proposal:

Since the project has not been constructed and thus cannot be operationally tested, an engineering study will be needed.

OID Response:

OID will perform a desk top study to evaluate the potential for adult fish entering the powerhouse tailrace channel and swimming into the turbine draft tubes causing injury or mortality. If needed the project would include a tailrace barrier or tailrace design to prevent fish from entering the tailrace channel.

3.4 Study Need for USFWS Resource Goals

Our overall goal is to conserve, protect, and enhance the Crooked River's cold-water fish species. The Service's goal for reintroduced steelhead and spring chinook is to achieve self-sustaining and harvestable populations. Our goal for bull trout is to implement pertinent elements of the Service's Bull Trout Recovery Plan.

OID Response:

OID understands and supports the Service's goal for reintroduction of steelhead and chinook as well as its goal regarding bull trout.