Bruce Scanlon, Manager
Ochoco Irrigation District
1001 NW Deer St.
Prineville, Oregon 97754

Re: Preliminary Application Document, Bowman Dam Hydroelectric Project
(FERC No. 14791)

Dear Mr. Scanlon:

National Marine Fisheries Service (NMFS) has reviewed Ochoco Irrigation District's (OID) Preliminary Application Document (PAD), dated November 1, 2018, for the proposed Bowman Dam Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project number 14791. The proposed Project would be constructed on the U.S. Bureau of Reclamation’s existing Bowman Dam; an earthfill structure approximately 240 feet high and 800 feet wide located at river mile 70 on the Crooked River about 15 miles south of the City of Prineville, Crook County, Oregon. Our comments follow.

General Comments

NMFS has statutory responsibility for the protection and enhancement of our Nation’s marine resources. Anadromous fish species are included in these marine resources and as you know, spring Chinook salmon and summer steelhead are being reintroduced into the Crooked River basin. Additionally, NMFS and the US Fish and Wildlife Service (USFWS) administer several laws that apply to the Nation’s natural resources including the Endangered Species Act (ESA) and Federal Power Act (FPA).

Endangered Species Act

The ESA establishes a national program for conserving threatened and endangered species of fish, wildlife, plants, and the habitat upon which they depend. Section 7 of the ESA and its implementing regulations at 50 CFR 402.14 require that Federal agencies determine if their actions may affect listed species or critical habitat. Furthermore, as required by section 7(a)(2) of the ESA, each federal agency must ensure that its actions are not likely to jeopardize the continued existence of endangered or threatened species, or adversely modify or destroy their designated critical habitat.
The reintroduced spring Chinook are not listed under the ESA, but the reintroduced summer steelhead are listed as threatened but currently designated as a non-essential experimental population (NEP) under section 10(j) of the ESA. For purposes of section 7 of the ESA, NEPs are treated as a species proposed to be listed unless the species is located in a National Wildlife Refuge or National Park, in which case they are treated as a threatened species and section 7 requirements apply. In this case, the reintroduced summer steelhead are not located in a National Park or Wildlife Refuge so consultation under section 7(a)(2) of the ESA is only required if the Federal Energy Regulatory Commission (FERC) determines that the proposed action would jeopardize the continued existence of the entire Middle Columbia River steelhead distinct population segment which the reintroduced steelhead belong to. However, we caution that the NEP designation will expire on January 15, 2025, so we advise that OID, as FERC’s designated non-Federal representative, engage in informal consultation with NMFS as it moves forward with development of the proposed Project. This will greatly improve the ESA consultation process should FERC choose to confer. By confer, we mean conducting a consultation that results in a conference opinion rather than a biological opinion from NMFS. The conference opinion contains all of the normal elements of a biological opinion including an incidental take statement with terms and conditions, but the take statement would not apply until the NEP sunsets. Lastly, critical habitat for steelhead has not been designated above the Pelton Round Butte Hydroelectric Project.

**Federal Power Act**

NMFS and the USFWS have authority to prescribe fishways under section 18 of the Federal Power Act (FPA). The PAD does not propose to construct fish passage facilities and currently NMFS does not recommend fish passage. After studies are completed and other resource management recommendations are developed, and after the proposed Project is more developed and operational details are better understood, NMFS will determine what its terms and conditions will be.

**Specific Comments**

**Section 2.4, Proposed Mode of Operation**

The PAD states that the Project will be remotely operated using a supervisory control and data acquisition (SCADA) control system and proposes to maintain minimum flow, irrigation and reservoir operation releases. As OID is aware, this function will be extremely important for reintroduced anadromous fish species as well as resident species. A failure in this system could result in significant loss of fish species and their prey. NMFS recommends that OID evaluate and develop a reliable way of maintaining uninterrupted flow in the Crooked River should the SCADA system malfunction.

**Section 3.2.2, Water Quantity**

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1 January 15, 2013, 78 FR 2893
This section states that the Deschutes Habitat Conservation Plan recommends winter flows as low as 55 cfs. This is an error, the proposed winter low flows are 50 cfs.

Section 3.2.3. Water Quality

We appreciate that OID is aware, and willing to address, the issue of elevated total dissolved gas (TDG) that occurs in the Crooked River below Bowman Dam. We recommend that OID consult with the Oregon Department of Environmental Quality and other interested Federal, state and tribal resource agencies as it develops methods to reduce the occurrence of elevated TDG.

Section 3.2.4. Fishery Resources

The PAD notes that the reach of the Crooked River between river mile 70.5 (Bowman Dam) and river mile 57 is managed for resident redband trout and that there are no key segments for anadromous fish spawning. We agree that this reach is managed for redband trout, but it should be noted that it is also managed for spring Chinook and steelhead. Adult steelhead have been tracked to Bowman Dam and we do not discount this reach for potential spawning habitat for spring Chinook or steelhead.

The PAD does not discuss methods for excluding adult fish from the turbines. Adult steelhead and spring Chinook can enter powerhouse draft tubes and encounter turbines, resulting in injury or death. We recommend that OID consider methods to exclude adult fish from the draft tubes. This could be in the form of a physical tailrace barrier, a water velocity barrier, a jump height barrier, or a combination of these.

Conclusion

NMFS appreciates the opportunity to review and comment on the PAD. We look forward to working with OID as it further develops Project design and conservation measures. Please contact Scott Carlon of my staff at 503.231.2379 (email: scott.carlon@noaa.gov) if you have any questions regarding this letter.

Sincerely,

F. Dale Bambrick, Chief
Columbia Basin Branch
NOAA Fisheries, West Coast Region