OREGON DEPARTMENT OF FISH AND WILDLIFE, OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY, AND FARMERS IRRIGATION DISTRICT MEMORANDUM OF AGREEMENT FOR HYDROELECTRIC OPERATION CONDITIONS FOR THE PURPOSE OF MEETING LOW-IMPACT HYDROPOWER INSTITUTE CERTIFICATION

RECITALS

Farmers Irrigation District (District) continues to implement their Water Management and Conservation Plan and Sustainability Plan (Plan) to modernize the irrigation system, maintain/improve fish passage, improve water conservation, increase instream flow, decrease water temperature, eliminate canal failures and non-point source pollutant transport, and restore/protect natural resources; and

In order to complete its Plan, the District must continue to realize a financial return on its investments in Irrigation enhancement and natural resource restoration and protection; and

Oregon Department of Fish and Wildlife's (ODFW's) goal is to implement measures to improve instream flow in the Hood River for fish spawning, rearing, and migration, and ODFW is working with the Oregon Department of Environmental Quality (ODEQ) to improve water temperature and other water quality parameters; and

ODEQ's goal is to implement measures to improve water temperature and other water quality parameters, and ODEQ is working with ODFW to implement measures to improve instream flow in the Hood River for fish spawning, rearing, and migration; and

Measures to improve instream flow in the Hood River for fish spawning, rearing, and migration and measures to improve water temperature and other water quality parameters are both advanced by the District's Plan; and

The District, ODFW, and ODEQ (collectively "the Parties") wish to further the positive outcomes of the District's Plan; and

The Parties make the following assumptions:

- The increased revenue from the sale of Renewable Energy Certificates (RECs) is dedicated to advancing the District's Plan; and
- ODFW and ODEQ will realize improved water quantity and water quality from the continued implementation of the District's Plan;

TERMS & CONDITIONS OF AGREEMENT

The District will operate under the conditions set forth in Exhibit A (Instream Flow Methodology), which is specifically incorporated herein by reference, and will continue to implement the actions set forth in Exhibit B (Temperature Monitoring Methodology), which is specifically incorporated herein by reference, provided the following conditions continue to be met:

- The District has secured and, if economically sustainable, will maintain Low-Impact Hydropower Institute (LIHI) certification (Certification) to achieve increased revenue from the sale of Renewable Energy Certificates (RECs); and
- The District will realize a net positive revenue from its RECs;

Furthermore, ODFW and ODEQ will support the District's efforts to maintain Certification, provided that the conditions laid out in Exhibit A (Instream Flow Methodology) and Exhibit B (Temperature Monitoring Methodology) continue to be met.

TERMINATION OF THE AGREEMENT

This Agreement may be terminated by written agreement of all three of the Parties.

EFFECTIVE DATE OF THE AGREEMENT

The "Effective Date" is the day the last of the Parties executes the Agreement.

TERM OF THE AGREEMENT

This agreement shall terminate on the expiration date of the LIHI certification, March 25, 2029.

EXHIBIT A INSTREAM FLOW METHODOLOGY

Oregon Department of Fish and Wildlife LIHI Certification Conditions:

- The District will operate and maintain existing fish protection and mitigation measures as conditioned by the agencies in the FERC exemption.
- ODFW will support the District's effort to maintain Certification so long as the District continues to operate in the manner described herein:
 - The District agrees to contact the ODFW Field Office in The Dalles when ceasing or starting hydropower diversion or cutting Farmers Canal diversion to 40 cfs.
 - o The District will provide a yearly summary report of the operational shut-down or cut-back periods by the close of each calendar year.
 - Beginning from the date of this agreement and continuing so long as this agreement remains in effect, the District shall operate its hydroelectric system based on instream flows in the Hood River as measured at the USGS gauge station at Tucker Bridge according to the following prescribed parameters:
 - During the months of July through October, when daily mean discharge in the Hood River is below 250 cfs for three consecutive days, diversion from the Hood River into Farmers Canal, as measured at the Farmers Canal Deep Cut meter, shall not exceed 40 cfs until the daily mean discharge in the Hood River exceeds 250 cfs for three consecutive days. The District may generate through Plant 2 if operationally appropriate.
 - Beginning at 10:00 a.m. on August 16 and continuing to 10:00 a.m. on August 30, diversion from the Hood River into Farmers Canal, as measured at the Farmers Canal Deep Cut meter, shall not exceed 40 cfs. The District may either bypass operational overflow through Plant 2 or generate through Plant 2.

EXHIBIT B TEMPERATURE MONITORING METHODOLOGY

Oregon Department of Environmental Quality LIHI Certification Conditions:

- The District will operate and maintain existing fish protection and mitigation measures as conditioned by the agencies in the FERC exemption.
- ODEQ will support the District's effort to obtain and maintain Certification so long as the District's
 hydropower system operation does not cause thermal effects in excess of ODEQ standards (or does
 not exacerbate thermal conditions already in excess of ODEQ standards) as determined by the below
 temperature study.
- To determine the thermal effects of its hydropower system operation as to:
 - o How the District's Plant 2 tailrace affects temperatures in the Hood River; and
 - o How the Farmers Canal hydropower diversion affects temperatures in the Hood River; The District shall collect data in at least these locations:
 - O At the upstream end of the Farmers Canal diversion to determine the temperature of the river at the point of diversion.
 - o In the Plant 2 tailrace upstream of the Hood River to assess how much the diverted water temperature rises, falls, or remains constant at the tailrace (just before entering the river) relative to the river temperature at the Farmers Canal diversion.
 - o In the mixing zone below where the Plant 2 tailrace enters the Hood River to determine the temperature of the river downstream of FID hydropower operations.
 - o In the Hood River above the confluence with Neal Creek, to assess the thermal effects of the diversion as separate from natural heating that might occur along the project bypass reach on the Hood River.
- The District shall provide an annual summary report to ODEQ of the collected data at the above locations.
 - The District shall include daily mean flow in the mainstem Hood River (as measured and reported by USGS at the USGS gauge station at Tucker Bridge) and in the tailrace (as measured through Plant 2) in this annual summary report.
- The District agrees to contact the ODEQ office in Bend when ceasing or starting hydropower diversion or cutting Farmers Canal diversion to 40 cfs.

All Parties approve and agree to this Memorandum of Agreement and Associated Exhibits and agree to support the District's effort to maintain Low-Impact Hydropower Institute Certification, so long as the District continues to operate in the manner described.

Les Perkins, Manager Farmers Irrigation District

Erica Kleiner, Deputy Director for Administration
Oregon Department of Fish and Wildlife

Smita Mehta, TMDL Basin Coordinator
Oregon Department of Environmental Quality

11/26/2019

11/15/10

Date