March 25, 2019

TO: Chair Helm and Members of the House Energy and Environment Committee

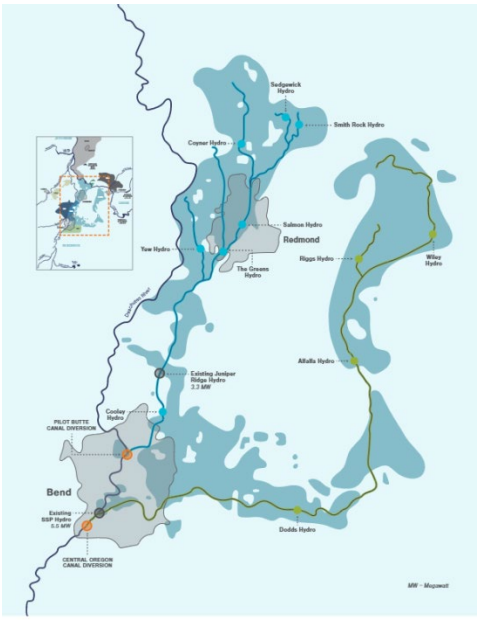
FROM: Central Oregon Irrigation District, Redmond, OR

RE: Letter of Support for HB 3274 and HB 2857

Central Oregon Irrigation District strongly supports both HB 3274 and HB 2857. These bills are crafted to provide support for important community scale renewable energy projects within the State of Oregon.

Central Oregon Irrigation District (COID) has been serving farmland in the Central Oregon Deschutes Basin since 1918. COID serves nearly 45,000 acres of land within an 180,000 acre area in Central Oregon, and provides water to over 4,000 accounts. More than 450 miles of canals provide agricultural and industrial water to the Terrebonne, Redmond, Bend, Alfalfa and Powell Butte areas. In addition, COID provides water to the Cities of Redmond and Bend. In Bend, many parks and schools receive water through the COID system.

In 1989, COID commissioned and completed the Siphon Power Project. This hydroelectric power plant can produce 5.5 megawatts of electricity, which is being sold to Pacific Power. This facility uses water from the Central Oregon Canal. Once the water goes through the facility it is returned to the river approximately one mile down river from the CO Canal diversion. This enables the District to further develop capital improvements to make the distribution system more efficient and upgrade the canal system to benefit the water users.



In addition, the COID is the managing partner in the operation of the 55,000 acre foot Crane Prairie Reservoir, located on the east side of the Central Cascades.

Micro-hydropower projects are beneficial for a number of reasons. Located along irrigation canals, these small facilities use the energy from water rushing though a canal to spin turbines and produce electricity, cleanly and efficiently. First, these projects generate revenue. This revenue can be used to help defray the cost of large-scale water conservation projects, which often result in increased instream flows in the Deschutes River for salmon, steelhead, Oregon spotted frogs and other species; and, for recreation. Second, micro-hydropower projects are usually built in conjunction with buried pipe to replace older, open canals. Piping canals helps

to improve public safety. Finally because these projects result in the replacement of older, open canals with new, pressurized systems, local farmers and ranchers benefit. Pressurized systems conserve water, and provide a more consistent, reliable flow of water for crops, livestock and other uses.

COID has a total of seven (7) future hydro projects on the Pilot Butte Canal, which have the potential to generate 8.3 Megawatts. In addition, the Central Oregon Canal has four (4) future hydro projects, which have the potential to generate 4.575 Megawatts.

Currently, COID has secured $25 million in PL-566 funds from the Natural Resources Conservation Service (NRCS). COID is in the process of working on securing matching funds so that we can start construction in fall of 2019. COID, along with North Unit, has invested $2 million in engineering for the Pilot Butte Canal so that we will be ready to start construction this fall. The seven phases of the Pilot Butte main canal pipeline project will put 156 cfs of water back into the Deschutes River for fish and Oregon spotted frogs. The potential for 8.3 Megawatts of clean, green, renewable energy from the seven potential sites that have been identified in COID's system Improvement plan could be a major funding source for building a $500 million project.

Under the current Schedule 37 rates from Pacific Power, these eleven (11) plants will not get built.

HB 3274 and HB 2857 will change this dynamic and make these eleven hydro plants a reality. Modernization of COID's irrigation district is essential to the viability of the Deschutes basin and will help to create sustainable farming in both Central Oregon and North Unit Irrigation Districts.

Central Oregon Irrigation District asks for your support in passing both HB 3724 and HB 2857.

Respectfully,

Craig Horrell
District Manager
Central Oregon Irrigation District

COID HYDRO PILOT BUTTE CANAL

	Cooley Hydro 2.9 MW	The Greens Hydro 80 kW	Yew Hydro 110 kW	Salmon Hydro 2.3 MW	Coyner Hydro 500 kW	Smith Rock Hydro 25 kW	Sedgewick Hydro 500 kW
Project Cost Estimate	$9,609,375	$923,438	$923,438	$7,560,938	$2,515,313	$513,750	$2,874,688
23-Year Total Revenue	$12,317,608	-$629,315	-$245,553	$10,003,756	$1,024,001	-$488,006	$897,316
Cost Per Mega-Watt	$3,313,577.59	$11,542,975	$8,394,890	$3,287,364.35	$5,030,626	$20,550,000	$5,749,376

NOTE: Juniper Ridge Phase 2 adds 1.7 MW to the existing Juniper Ridge hydro facility

COID HYDRO CENTRAL OREGON CANAL

	Dodds Hydro 2.7 MW	Alfalfa Hydro 1.5 MW	Riggs Hydro 150 kW	Wiley Hydro 225 kW
Project Cost Estimate	$8,811,563	$6,231,250	$1,016,875	$1,196,563
23-Year Total Revenue	$6,024,135	$2,008,608	-$19,064	$398,634
Cost Per MegaWatt	$3,263,541.85	$4,154,166.67	$6,779,166.67	$5,318,057.78