

## **Appendix E**

### **Organizations and Resources for Implementation of the Affordable Power Measures**

## **Appendix E Organizations and Resources for Implementation of Affordable Power Measures and Efficiency Enhancements**

### **General Overview**

There are a variety of energy and water related agencies and non-profit organizations involved in advancing the proliferation of renewable energy technologies, providing technical assistance, and creating grant or loan programs that help farmers and irrigators cost effectively reduce energy and water consumption while spurring economic development. With the focus on creating more sustainable agricultural practices, these organizations have collectively brought millions of dollars to bear that is changing the way farmers and irrigators operate throughout the western United States especially. The Analysis Team conducted a literature search of the agencies and organizations involved in renewable energy, or energy and water conservation, and compiled a list of the major programs and organizations at the Federal and State level in California and Oregon as shown in Table E-1.

### **Federal Agencies**

Two of the major federal agencies involved in energy development in the United States are the US Department of Energy and the US Department of Agriculture (USDA). Dating back to the American Resource and Recovery Act, the Department of Energy focused on moving renewable technology to market at affordable prices. Much of the focus was on launching and maturing technologies through research and development grants, however this work laid the foundation for programs like the USDA's Environmental Quality Incentives Program (EQIP) which is now taking advantage of these technologies and offering grants and technical assistance for renewable energy generation and energy or water conservation technologies to implement at the farm or ranch level. In the case of the EQIP program, these programs are cost share programs; however, the Renewable Energy Program for America not only offers grants, but also loan guarantees at favorable rates to further stimulate private business-related renewable energy development.

### **State Agencies**

The states of California and Oregon are among the more progressive adopters of renewable technology and share a similar energy and water conservation focus. The California Energy Commission (the Commission) is leading the state's goal of achieving a 100% clean energy future. As the state's agency tasked with managing energy related policy and programs, the Commission is concentrating its efforts on reducing energy costs and environmental impacts of energy use to build a better energy future. Much of the focus with the Commission mirrors the federal government's emphasis on research and development, reflected in 11 of the 18 energy related funding opportunities in 2019. One particular program offers 1% loans for the development of renewable energy efficiency and renewable energy generation projects. Oregon offers considerably more agricultural focused programs, several of which are tied to the state's Energy Trust of Oregon program (Energy Development Grants program in Oregon's Department of Energy, and a non-profit, Farmer's Conservation Alliance.

## **Non-profits**

Perhaps the most popular and widely known energy and water related non-profit in Oregon is the Farmer's Conservation Alliance. Already hard at work in the Klamath Basin, they bring an irrigator mindset to the energy and water conservation cause, sponsoring a program known as the Irrigation Modernization Program. This program has transformed the delivery and management of water across the state, delivering considerable energy and water savings through the piping of many open earthen canals. The Irrigation Modernization Program has a very "hands on" approach, getting engaged through the life cycle of district level analysis through funding and into implementation.

## **Toward a more sustainable future**

The resources are available for the asking, requiring a simple email or phone call to get started. In many cases eligibility extends down to the individual farm level and case studies abound with success stories like the Criss family's 2,000 acre grain and alfalfa farm in Bonanza, Oregon. The Criss farm invested in a new pivot irrigation system to replace an aging wheel line system. They received \$21,000 in cash incentives from the Energy Trust program towards the overall cost of the irrigation system upgrades. The new system's smaller and more efficient pump is expected to generate \$5,900 of savings in energy costs and 84,000 kilowatt hours of electricity annually. Additionally, the new system is estimated to save the farm nearly 23,739,000 gallons of water annually. Taking advantage of investments like this will result in a significant reduction in energy and water consumption in the Klamath basin and can provide reasonable returns on each dollar invested.

**Table E-1 Major Organizations and Resources available to Water Users in the Klamath Basin**

Program (Clickable Link)	Focus Area	Eligibility	Incentive	Availability	State(s)	Program Status <sup>1</sup>
<a href="#">Environmental Quality Incentives Program (EQIP) USDA Natural Resources Conservation Service (NRCS)</a>	Water and Energy Efficiency	Conservation equipment and practices	Private businesses Statewide	Cost share	CA, OR	Open
<a href="#">EQIP On Farm Energy Initiative (NRCS)</a>	Energy Efficiency	Energy audit and conservation equipment (e.g., pumps, VFDs)	Private businesses Statewide	Cost share	CA, OR	Open
<a href="#">Renewable Energy Program for America (USDA)</a>	Energy Efficiency	Renewable energy systems and energy efficiency improvements	Private businesses Statewide	Grants and loan guarantees	CA, OR	Open
<a href="#">California Energy Commission (Energy Conservation Assistance Act)</a>	Energy Efficiency and Renewable Energy Generation	Renewable energy systems and energy efficiency improvements	Cities, Counties and Special Districts	1% loans (up to \$3M)	CA	Open (1 <sup>st</sup> come, 1 <sup>st</sup> served basis)
<a href="#">Energy Trust of Oregon</a>	Water and Energy Stewardship	Water conservation and energy	Private businesses Statewide	Cash Incentives, Technical Assistance	OR	Open

Program (Clickable Link)	Focus Area	Eligibility	Incentive	Availability	State(s)	Program Status <sup>1</sup>
		efficiency improvements				
<a href="#">Oregon Community Solar Program</a>	Solar Energy	Renewable community scale energy systems	Eligible Project Managers <sup>2</sup>	Cost Share with Pacific Power	OR	Opening in January 2020
<a href="#">Oregon Department of Energy Renewable Energy Development Grants</a>	Renewable Energy	Renewable energy systems development	Private businesses Statewide	Grants	OR	Open
<a href="#">Farmers Conservation Alliance Irrigation Modernization Program</a>	Water and Energy Efficiency	Irrigation Systems	Irrigation Entities	Cost Share	OR	Open

Notes:

<sup>1</sup> Each program has different windows of availability and grant or loan application deadlines including some that just have ongoing availability.

<sup>2</sup> The program has a specific set of eligibility rules for project managers. See information [here](#)