



Washington
State Department of
Agriculture

Washington's Columbia Basin Project and Agriculture

River Governance Council
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COLUMBIA BASIN PROJECT - CBP

- **Authorized under the Reclamation Act of 1939 and the Columbia Basin Project Act of 1943**
- **Grand Coulee Dam stores 6.4 million acre-feet (MAF) of water under 1938 state water right in Lake Roosevelt**
- **3 hydroelectric power generating plants and a pump generation plant – 6,800 MW capacity generating 21 billion kilowatt hours of electricity (largest hydropower generating facility in the US)**
- **CBP facilities provide power generation, irrigation, flood control, stream flow regulation for fish migration, fish and waterfowl habitat, navigation, and recreation**
- **Funds operation of 3 salmon hatcheries (Leavenworth Complex)**

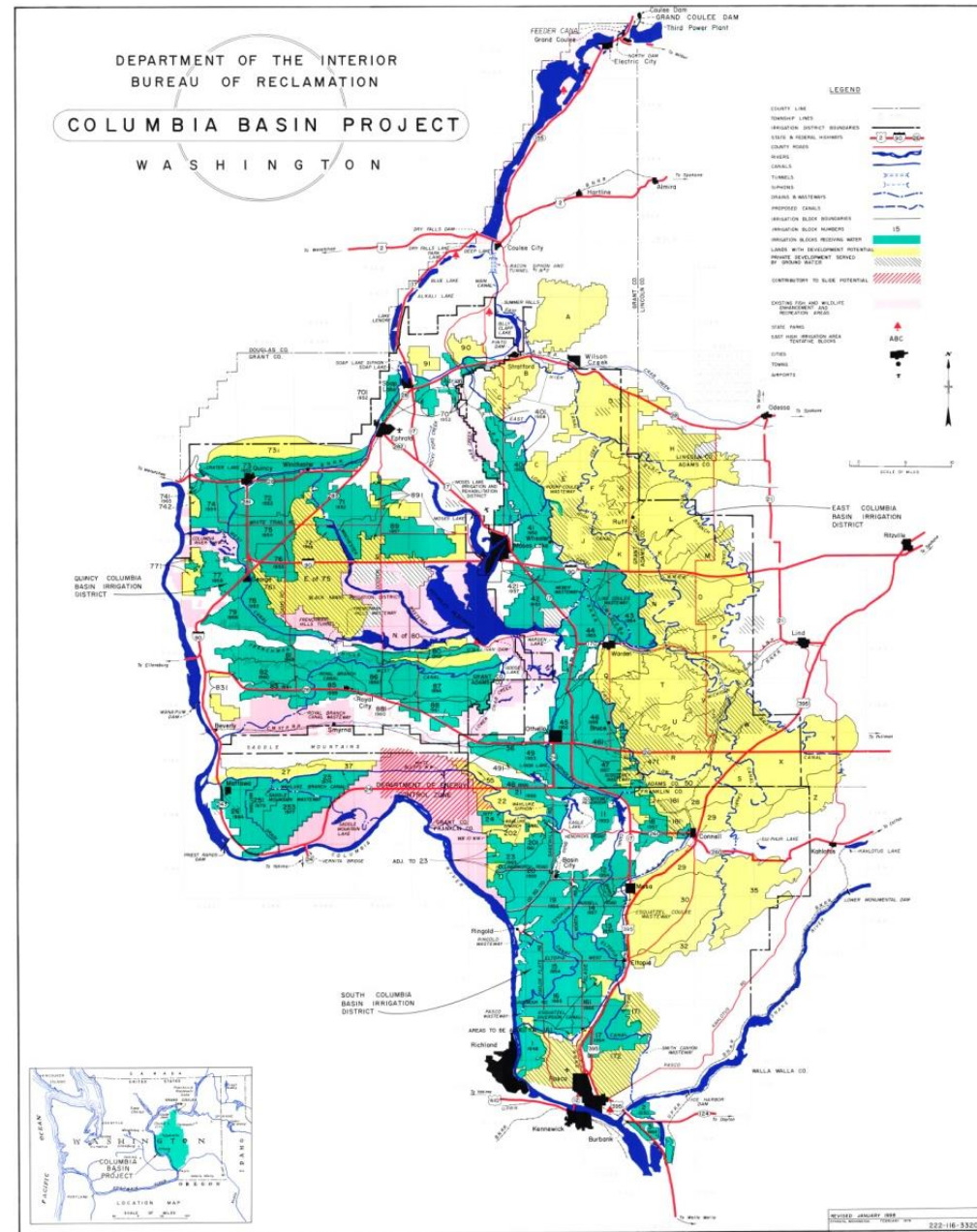
COLUMBIA BASIN PROJECT – IRRIGATION

- **Construction began shortly after World War 2, first water delivered from Lake Roosevelt in 1952**
- **Consists of Grand Coulee Dam and Lake Roosevelt; Keys Pumping Plant; Banks Lake/Reservoir (750,000 acre-feet); Pinto Dam and Billy Clapp Lake; main, west and east low canals; O’Sullivan Dam and Potholes Reservoir; and Potholes Canal**
- **Includes 330 miles of major distribution canals, 2,000 miles of laterals, and 3,500 miles of drains and wasteways**
- **CBP currently serves about 675,000 acres of cropland**
- **Authorized for phased expansion up to 1,029,000 acres of cropland**

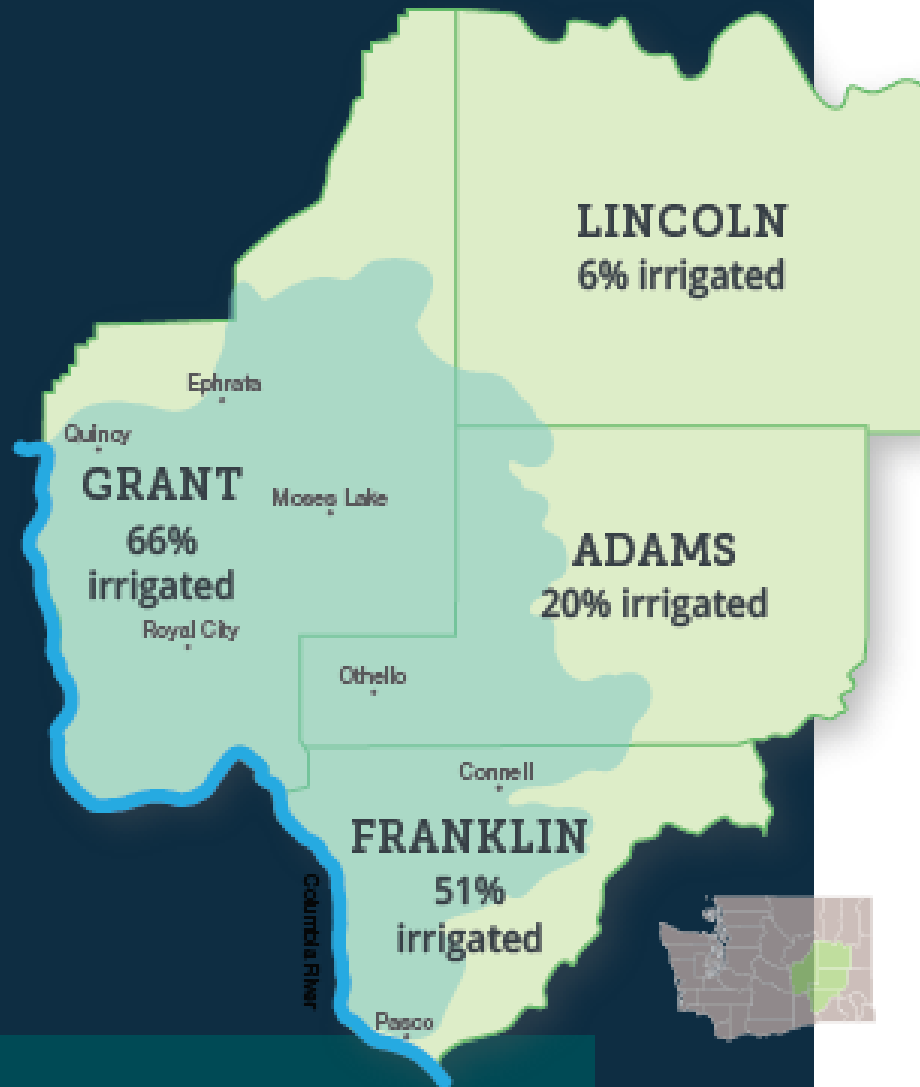
Grand Coulee Dam



Map of the Columbia Basin Project



Counties Most Impacted by the Columbia Basin Project



- The U.S. Bureau of Reclamation's Columbia Basin Project includes the Grand Coulee Dam and a vast irrigation system serving the region.
- Roughly 671,000 acres receive surface water. Additional acres use groundwater.
- Beyond reliable irrigation, the project provides and manages water for:
 - Municipalities
 - Industries
 - Flood and streamflow
 - Endangered species
 - Recreation
 - Power production

The Value of Agriculture

- Over \$3 billion in production value.
- Nearly \$3 million acres in production



Top 5 Commodities in the Columbia Basin



- Apples are the number one crop in Washington state.
- We are the number one apple-producing state in the nation.
- Nearly 2/3 of Washington's potatoes are grown in the Columbia Basin region and 20% of all US potatoes.

- Wheat is the number 1 crop by acres – over 1/3 of Washington's wheat is grown in the Columbia Basin region.

The Value of Water

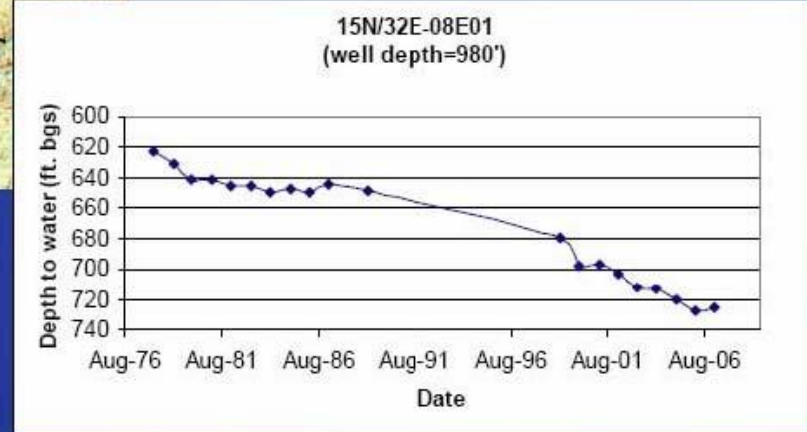
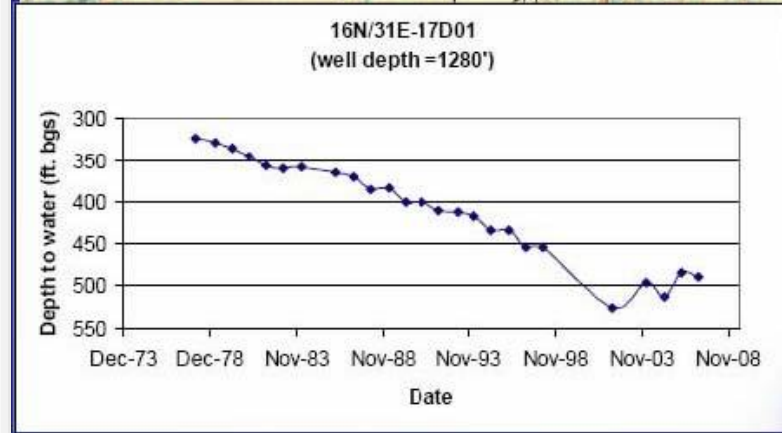
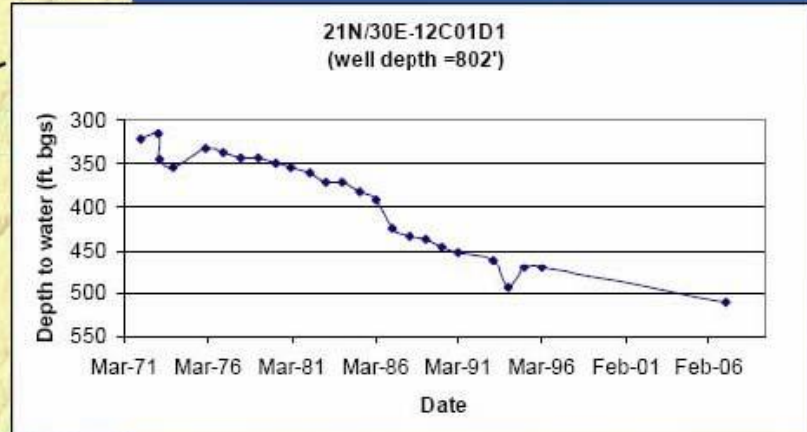
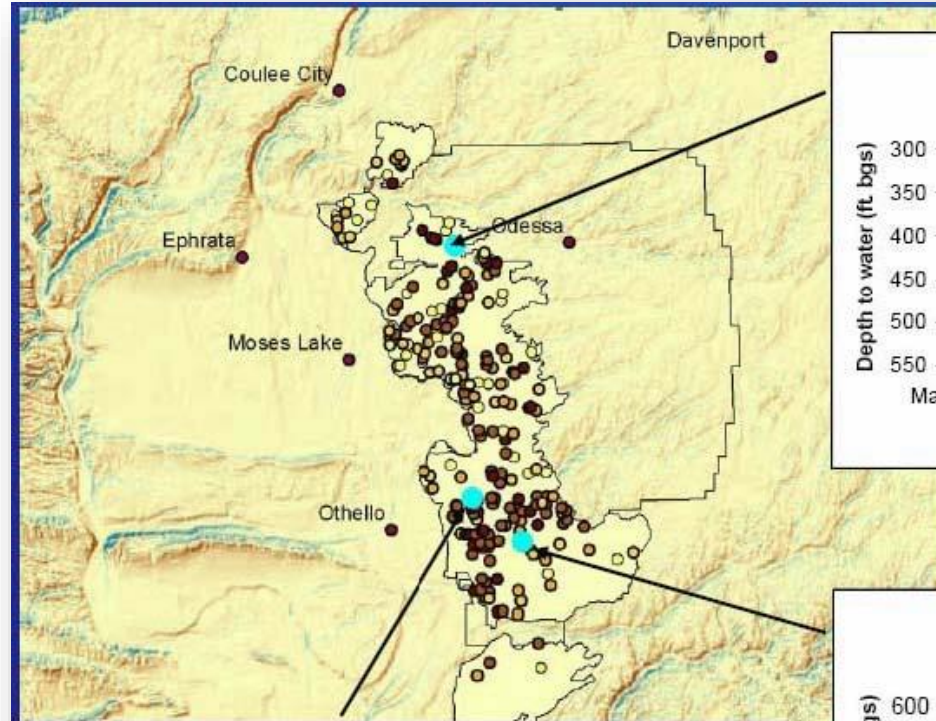


Groundwater is threatened by a declining aquifer, a problem for agriculture and rural communities. Efforts to replace the aquifer are underway.

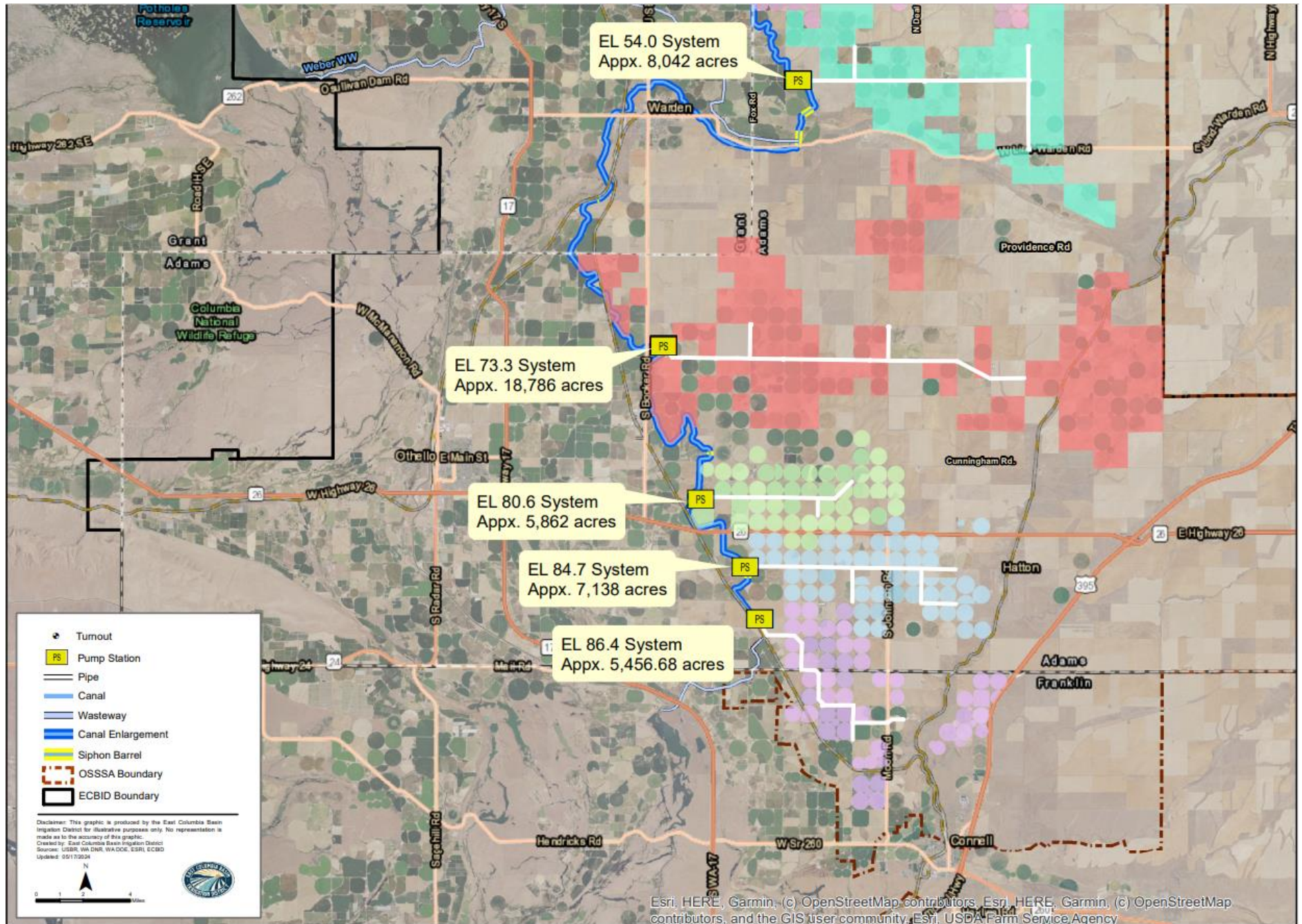
Odessa Groundwater Replacement Program Background

- ~ 102,000 acres in eastern 1/3 of Columbia Basin Project developed on ground water wells
- Most wells drilled in the 1960s and 1970s
- Ground water levels started to decline rapidly beginning in the 1980s
- Washington State Legislature passed the Columbia River Water Supply Development (Management) Act (RCW 90.90) in 2006 – Directed and provided funding to Ecology to find alternatives for ground water users
- Ecology's Office of Columbia River, Bureau of Reclamation, East Columbia Irrigation District initiated Odessa Ground Water Replacement Project

Declining Trends in Groundwater Levels

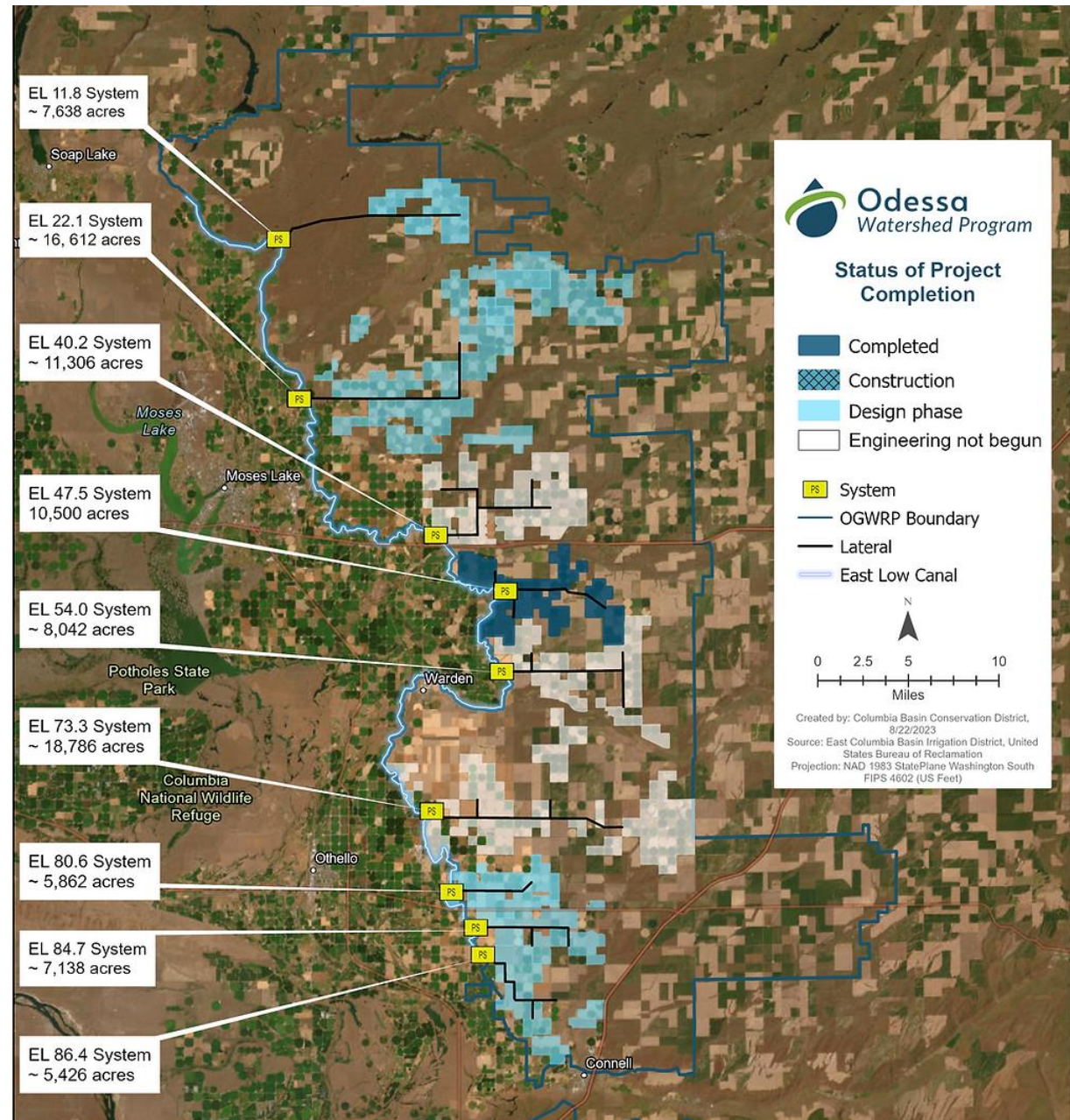


Odessa Pumping Plant and Pipeline Map (South)



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Esri, USDA Farm Service Agency

Odessa Groundwater Replacement Program Status Map



Project Partners

- Thank you to:
 - Bureau of Reclamation
 - Washington State Department of Ecology's Office of Columbia River
 - USDA Natural Resources Conservation Service
 - Columbia Basin Conservation Commission
 - Landowner Participants





Questions



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