

28 & 30 July 2020

Agriculture & Rangelands Adaptation

- NRCS plays a role in helping to increase water use and irrigation efficiency. Current Farm Bill prioritizes efficiency by incentivizing higher efficiency on current acres rather than expanding acreage.
 - Improved irrigation efficiency by switching from flood irrigation to sprinklers or big gun pivots to drip irrigation.
 - Piping irrigation canals in eastern Oregon with PL-566 watershed funding.
 - Using nozzles that are more efficient on irrigation equipment.
- Design improved watering systems for livestock that are resilient during times of drought.
- Look for low-tech, low-cost actions with limited funding for outreach from watershed councils.
- Challenge: absentee land owners, leasing relationships can make long-term planning challenging.
- Question: Could NRCS have a Climate Adaptation Management System similar to Soil Health Management Systems to indicate what kind of conservation systems needs to come along with shifting footprint of crops as climate changes? Would need to look at practice scenarios and enhancement to help adapt. Help people adapt to what crops they are growing when we know that there might not be the ability to support with full water needs of that crop.
- In areas with no available water supply, like coastal areas with high tunnels, water catchment systems or ponds are of interest.
- Farmers from Central CA agriculture are moving to Oregon and seeing more hazelnuts being planted/grown in Oregon.
- Work with Oak partnerships to reduce land conversion from Oak woodlands to grape vineyards.
- Newer crops (i.e. hemp or switching systems dairy to raspberry production) have potential to increase water footprint.
 - NRCS and OSU hemp department working together on needs for hemp
- Adaptation in agriculture we focus on improving soil health.
- Adaptation using small watershed program –watershed conservation aspect, improve water reliability (quality and quantity).
- Adaptation: market-based incentives to donate water downstream and put water back into the streams over time.
- Dry farming is an option for vegetable producers west of the cascades. 20-inch precipitation is about the threshold for successful dry farming.
 - Barriers to dry farming –May not have enough of a soil profile to work with at a site. Organic farmers, want to move away from tillage and toward lower disturbance (and increase soil health), but being able to scale up alternatives for weed control to get away from tillage is a barrier. There are some organic herbicides that folks are trying.
- Challenge: Growing water demands –there’s just not enough water to go around even when climate is normal and agricultural demands are growing with new industries (e.g. hemp)