



Washington
State Department of
Agriculture

2021 Drought and Heat Impacts to Agriculture

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WA Agriculture



Rich soils, diverse climates and large-scale irrigation make Washington State one of the most productive agricultural regions in the world

- Over 300 crops produced
- Variety of climates and growing regions
- Value of production \$9.49 Billion
- Agriculture and food processing provide over 160,000 jobs





Wheat and Barley Impacts



- Lack of spring rains and low soil moisture
- Wheat Yield Reductions
 - 5 Year Average: 152.2 million bushels
 - 2021 Production: 87.18 million bushels
- Quality Reductions
- Barley Yield Reductions
 - 5 Year Average: 6.2 million bushels
 - 2021 Production: 2.7 million bushels

Pulse Crops



- Peas
 - 5 year average : 2280 lb/acre
 - 2021 : 1200 lb/acre
- Lentils
 - 5 year average: 1190 lb/acre
 - 2021 : 920 lb/acre
- Garbanzos
 - 5 year average : 1656 lb/acre
 - 2021 : 680 lb/acre



Livestock



- Reduced yields in dryland hay
- Forage pasture
- Feed availability and cost
- Stock water supplies



Heat Impacts



- Increased irrigation demand
- Quality impacts
- Animal stress
- Berries
- Tree fruit



Photo Credit: Roza Irrigation District



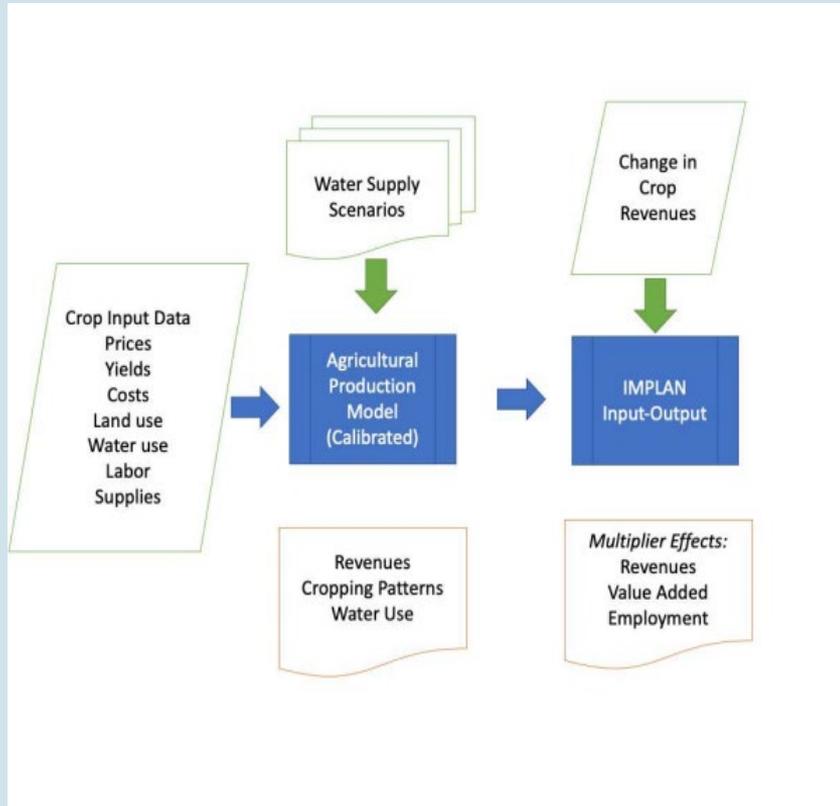
Heat Impacts- Potatoes



- Potatoes stop growing above 90-95 degrees
- Yield impacts varied regionally- average of 10% reduction
- Quality Impacts
 - Mis-shaped potatoes
 - Sprouting
 - Storage concerns

Photo Credit: WA Potato Commission

Economic Drought Assessment Tool



- Funded by Ecology OCR
- Developed by UC Merced
- Several stakeholders involved
- Macro scale analysis

Questions?

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