



THE UNIVERSITY OF ARIZONA  
**Cooperative Extension**

**Dr. Ethan Orr**

**Arizona Cooperative Extension**

**Agriculture, Natural Resources and Economic Development**



# On-Farm/ Pasture Water Irrigation Efficiency Grant

**ARIZONA USES LESS WATER TO SUPPORT MORE PEOPLE**

## Arizona Crop Production (Historical Perspective)

	1962	2020
Value of Crop Production	\$348.6M (\$2.98B- 2020)	\$3.86B
State Water Usage	7.34 MAF	7.0 MAF
State Population	1.41 Million	7.17 Million



THE UNIVERSITY OF ARIZONA  
Cooperative Extension

### *On-Farm Irrigation Funding*



- \$30,000,000 American Recovery Grant
- \$16,515,088 Private Sector
- \$15,200,000 Arizona State Legislature
- **Total Project \$61,715,088**

# On-Farm/ Pasture Water Irrigation Efficiency Grant



18,513 acres

36,418 WAF Annual Savings

Increased Crop Productivity  
Research into Soil Health/ Crops

County		Grant Amount	Acres		Private Sector Match	Estimated Water Savings-Annual Acre-Feet
Apache	1	\$315,000	210		\$85,000	1,000
Cochise	2	\$144,000	96		\$364,564	208
Graham	1	\$180,015	120		\$179,985	363
La Paz	5	\$4,371,000	2,914			6,413
Maricopa	8	\$4,346,170	2,897	2,836	\$4,736,433	6,602
Mojave	1	\$999,000	666	134	\$170,000	2,850
Navajo	1	\$375,000	250			500
Pinal	10	\$4,584,557	3,056		\$4,359,777	4,920
Santa Cruz	1	\$199,200	133		\$199,200	105
Yavapai	2	\$303,600	202		\$303,404	1,364
Yuma	30	\$7,182,458	4,795	204	\$6,116.725	12,093
<b>Total</b>	<b>62</b>	<b>\$23,000,000</b>	<b>15,339</b>	<b>3,174</b>	<b>\$16,515,088</b>	<b>36,418</b>

# On-Farm/ Pasture Water Irrigation Efficiency Grant

\$62 Million Project

Cross Disciplinary Team

*Impacts*



- 42% Private Sector Match
- Cost of Conserving water - \$628 WAF
- **\$209 per WAF over the three-year program**
  - Current estimated annual water savings  
36,418 WAF
  - (Projected Annual Savings 58,710 WAF)
- Positive Externalities
- Employment/ Dust Control/ Heat Island

# On-Farm/ Pasture Water Irrigation Efficiency Grant

## *Additional Opportunities*



- Telemetry – AZMET
- Education – Irrigators and Farm Workers
- Conveyance
- Soil Health and Irrigation Research
- Business and Industry Partnership

# Arizona Cooperative Extension

<https://extension.arizona.edu/water-irrigation-efficiency-program>



Dr. Ethan Orr  
Eorr@Arizona.edu