Dr. Ethan Orr

Arizona Cooperative Extension

Policy Tools and Programs for Agricultural Water Management



On-Farm/ Pasture Water Irrigation Efficiency Grant



Arizona Crop Production (Historical Perspective)

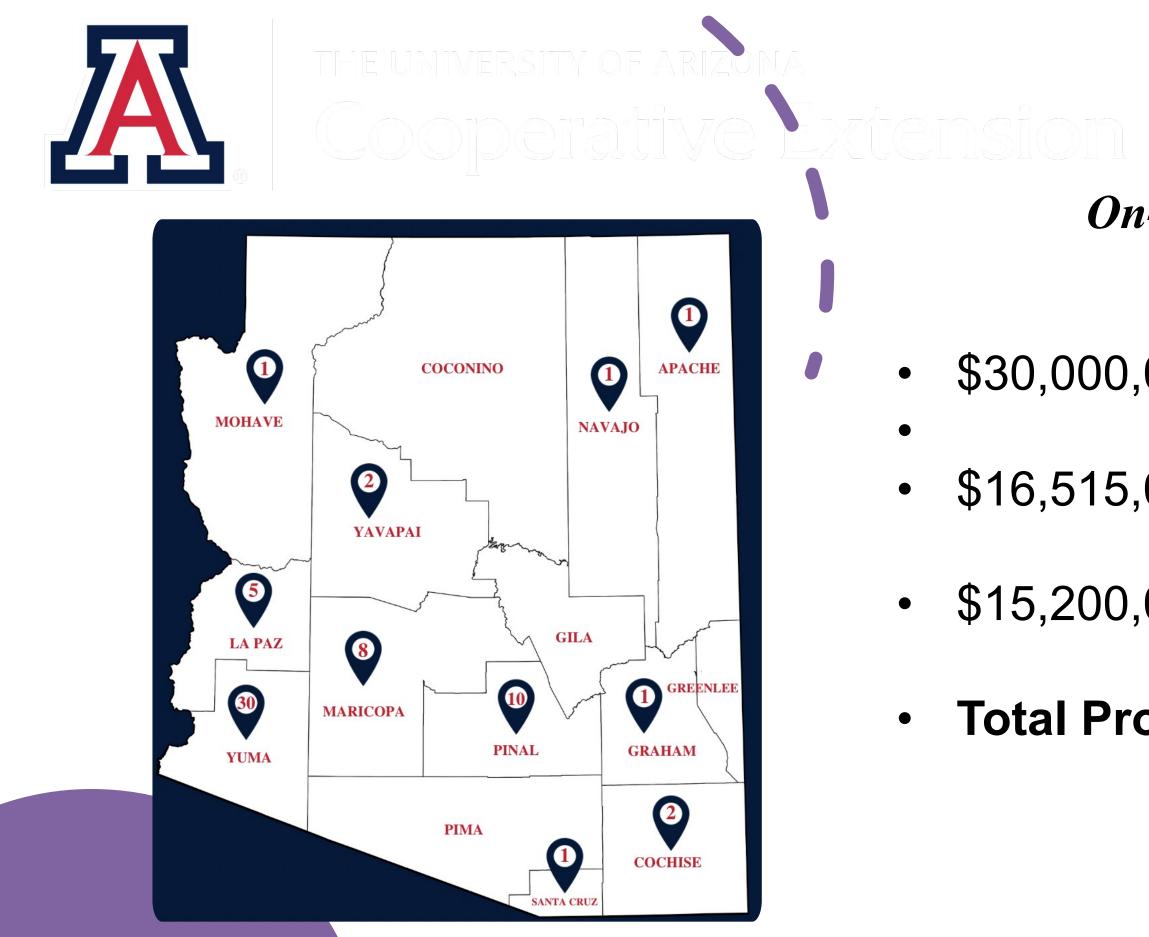
	1962	2020	
Value of Crop Production	\$348.6M (\$2.98B- 2020)	\$3.86B	
State Water Usage	7.34 MAF	7.0 MAF	an a
State Population	1.41 Million	7.17 Million	
	Contraction and the		



Policy Tools

Legal
Conservation/Partnership
Augmentation
Environmental

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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
Total	62	\$23,000,000	15,339	3,174	\$16,515,088	36,418

On-Farm/**Pasture** Water Irrigation **Efficiency Program**

Cross Disciplinary Team

Combine Financial and Research incentives

Stackable with other programs

Impacts

42% Private Sector Match Public Sector Cost of Conserving water -\$628 AF

 \$209 per AF • (over the three-year program)

Annual water savings 36,418 AF (Projected Annual Savings 58,710 AF)

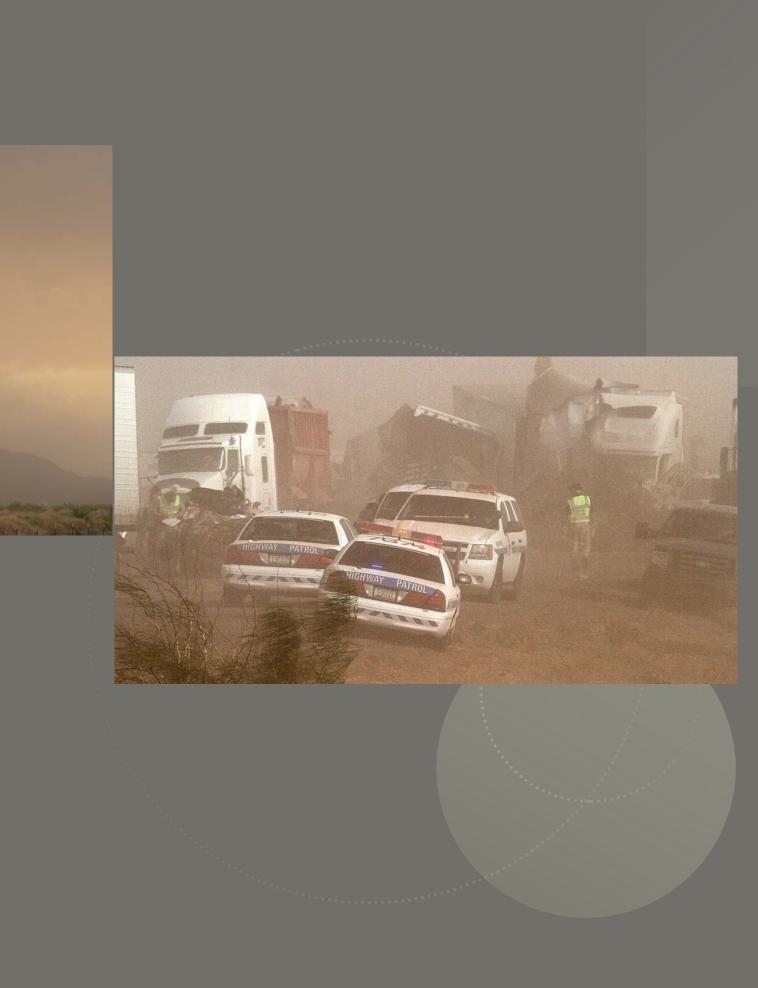
Crop Yield / Soil Health Research



Externalities

Heat Island
Dust/ PM-10
Subsidence
Liability

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Opportunities

- Align political interest around a solution
- Aggerate and celebrate the small wins
- Create multiple policy tools

Articulate a vision beyond a single actor

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Thank You





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