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Aapresid



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ABIERTO**

Sharon B. Megdal, PhD, The University of Arizona
Water Resources Research Center

Introduction to Panel on "No-Till Farming in semi-arid areas" Overview of Water and Agriculture in Arizona, USA

Farming uses significant surface water and
groundwater in Arizona, a semi-arid state in the
Southwestern United States



THE UNIVERSITY OF ARIZONA
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



Panelists

Sharon B. Megdal, PhD
is Director, Water
Resources Research
Center and Professor,
Environmental Science,
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This is work partially funded by USDA
NIFA Grant Award # 2021-68012-35914

Ron Rayner is a third-
generation farmer and a
partner in “A Tumbling T
Ranches”



Source: <https://www.farmprogress.com/conservation-and-sustainability/rayner-farm-honored-for-conservation-as-high-cotton-award-winner>

Debankur Sanyal, PhD
is Assistant Professor,
Soil Health, Department
of Environmental
Science, the University
of Arizona



Arizona is in the Colorado River Basin



Arizona

Colorado River Basin

- About 647,000 km²
- 7 states in the USA
 - If a nation, California's would be 5th or 6th largest economy
 - Los Angeles, California, is the 2nd largest city in the USA; Phoenix, Arizona, is the 5th
- 2 states in Mexico
- 30 Native Nations (Indigenous)
- ~ 40 million people

Hoover Dam and Lake Mead Affected by Megadrought



Lake Mead behind Hoover Dam



Photo: SB Megdal-Dec.2022

Snowpack vs. Runoff (% of average)		
	Snowpack	Runoff
2020	105%	61%
2021	86%	37%
2022	90%	63%
2023	161%	140%
2024	114%	83%

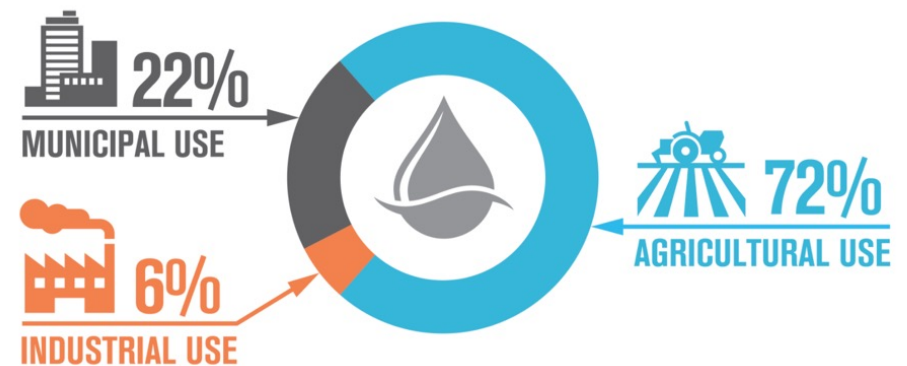
Arizona's water sources and demand

ARIZONA'S WATER SUPPLY



SOURCE: ADWR, 2020

ARIZONA'S WATER USE BY SECTOR (2019)



SOURCE: ADWR, 2020

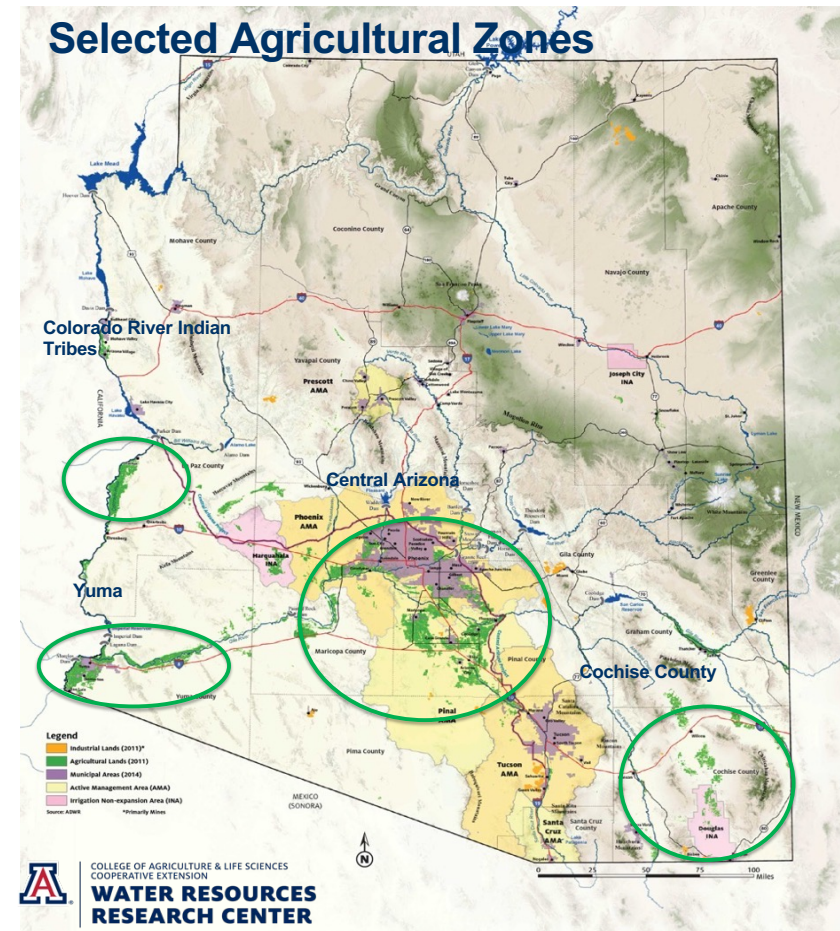
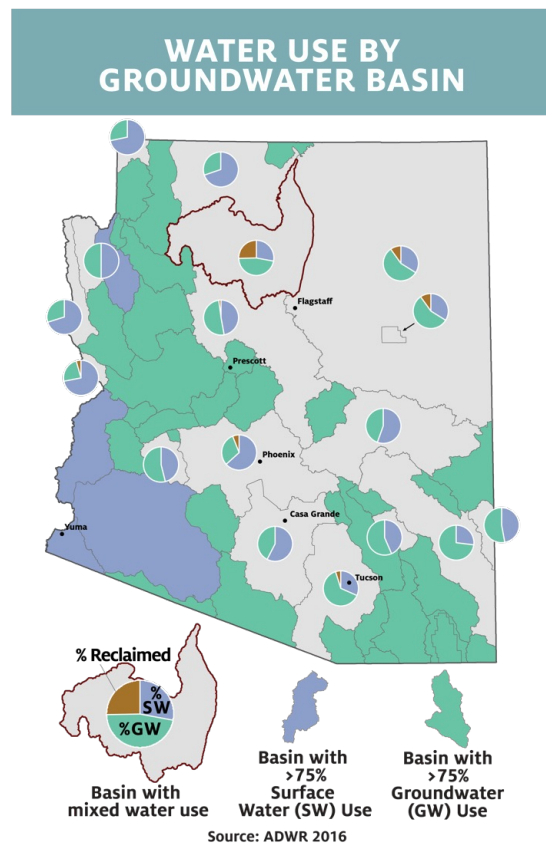
Across Arizona, water situations differ



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Hear now from Mr. Ron Rayner, who will be followed by Dr. Debankur Sanyal

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Debankur Sanyal, PhD is Assistant Professor, Soil Health, Department of Environmental Science, the University of Arizona



Muchas Gracias
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To learn more:
Join session Thursday at 10:00
How Water Supply Challenges are
Impacting Agriculture in Arizona, USA

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