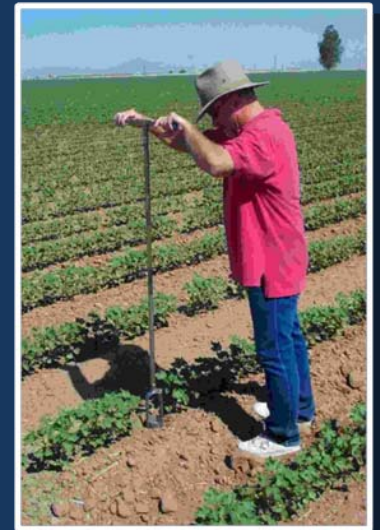


ADWR's Agricultural Conservation Programs

Nicholas Kilb

Water Resources Specialist

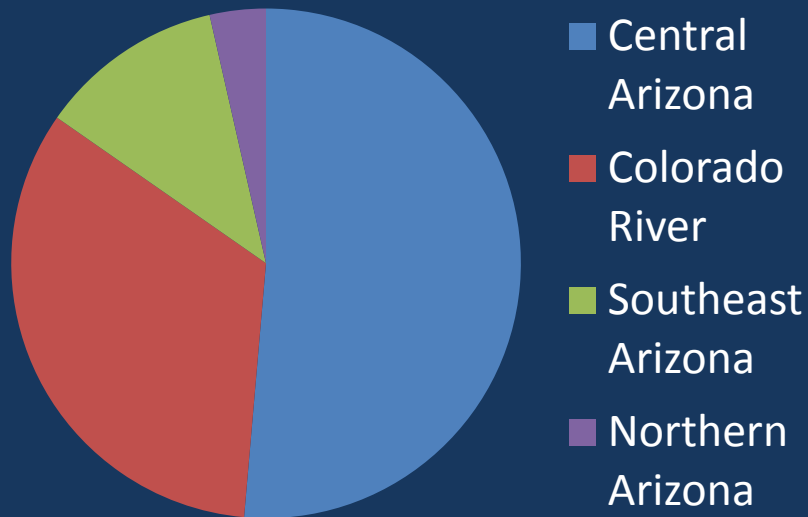
Agricultural Planner



Water Conservation/Energy Working Group
Governor's Blue Ribbon Panel Feb 25, 2010

Statewide Agriculture

Irrigated Acres by Region



- Overall acreage decreasing
- Water Use not decreasing as quickly as acreage
- 70% of total water use statewide
- Central Arizona counties account for 52% of irrigated land
- Counties along the Colorado River accounted for 33% of land

Active Management Areas (AMAs)

No New Irrigated Acreage!

- Irrigation Grandfathered Rights (IGFRs)
 - Based on land irrigated between 1975 and 1980
 - Tied to the land
 - Conveys with sale of land
 - May be leased along with the land
 - Currently, approximately 500,000 acres

AMA Agricultural Conservation Programs

- Irrigation Grandfathered Rights

- Base Program
- Historic Cropping Program
- Best Management Practices (BMP) Program
- Small Rights (<10 acres)

- Irrigation Distribution Systems

- Line all canals OR
- Limit lost and unaccounted for water to < 10%

Base Program

$$\text{Allotment} = \frac{\text{Water Duty} \times \text{Water Duty Acres}}{\text{Assigned Irrigation Efficiency}}$$

- Water Duty

- The quantity of water required to reasonably irrigate the crops grown between 1975-1980

- Water Duty Acres

- The maximum number of acres planted in any year between 1975-1980

Base Program

- Assigned Irrigation Efficiency
 - Efficiency of water application to crops
- Assigned Irrigation Efficiency has changed with time:
 - First Management Period: 50%-70%
 - Second Management Period: 50%-85%
 - Increased with time, several intermediate water duties
 - Third Management Period: 80%
 - Historic Cropping Program: 75%

Base Program

- Flexibility Accounting
 - Allows farmers to “bank” credits
 - Use less than allotment, earn credits
 - Use more than allotment, debit credits
 - Credits may be sold in 2nd year after earning
 - Out of compliance when account is $< -50\%$ of allotment
 - Currently, nearly 12 million acre-feet worth of flex credits registered.

BMP Program



- Point system
- Four categories:
 1. Water Conveyance Systems
 2. Farm Irrigation Systems
 3. Irrigation Water Management
 4. Agronomic Management
- Water savings at least equivalent to the Base Program



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