



## Water Rights and Subflow Issues

### ■ Types of Water

- Paper Water (water rights and credits)
- Technical Water (hydrologic definition), also known as “Wet” Water (example: Verde median flow on 3/26 = 670 cfs)
- The Real Thing – Put it in a cup (example, actual Verde flow on 3/26 = 132 cfs)



## Water – Owned by Government, loaned to Citizens as a “Right”

- Groundwater –
  - Beneficial Use outside AMA, Just a Permit to Drill
  - Strict Regulations inside an AMA
- Surface Water
  - Doctrine of Prior Appropriation (First in Time, First in Right)
    - Water Right Filings
    - Decrees (State & Federal)
    - General Stream Adjudications
- Federal Reserved Rights
- CAP & Colorado River
- Effluent – Only Private Ownership



## Water Law Jurisdiction

- Bifurcated legal system – Groundwater Law and Surface Water Law do not recognize each other
- Groundwater and Surface Water really are just *WATER*
- The “Subflow” issue is a way for the legal system to recognize the interaction between Surface Water and Groundwater

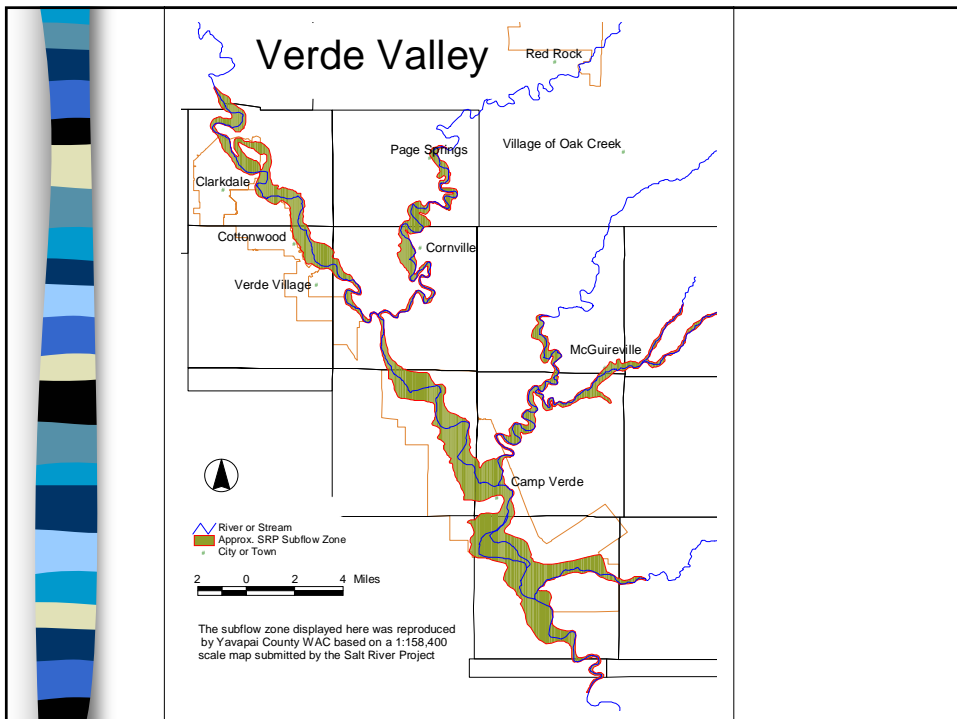


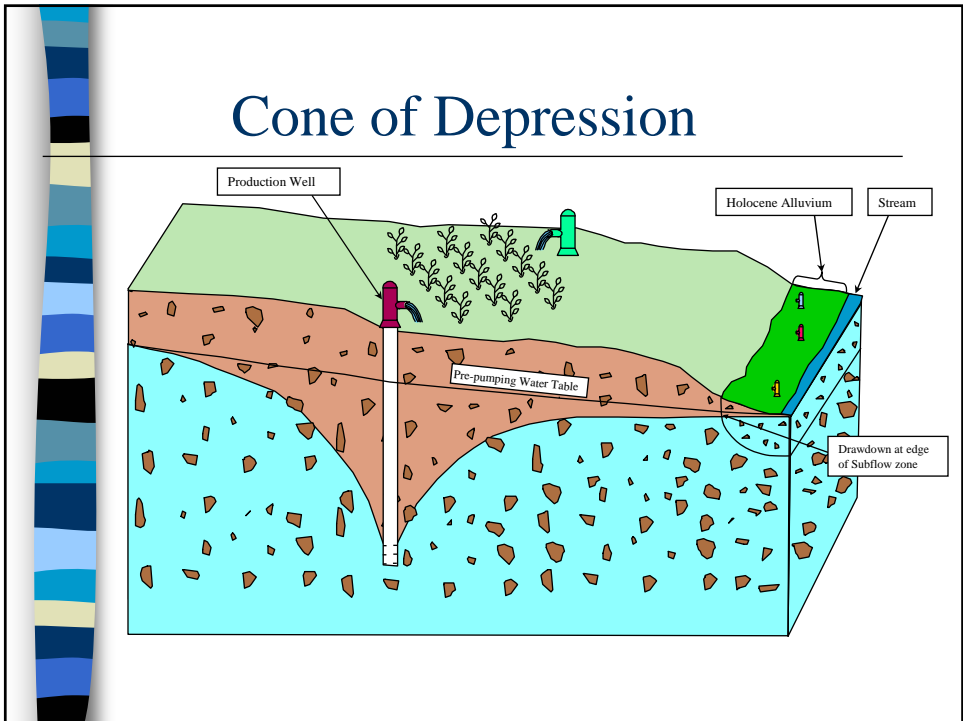
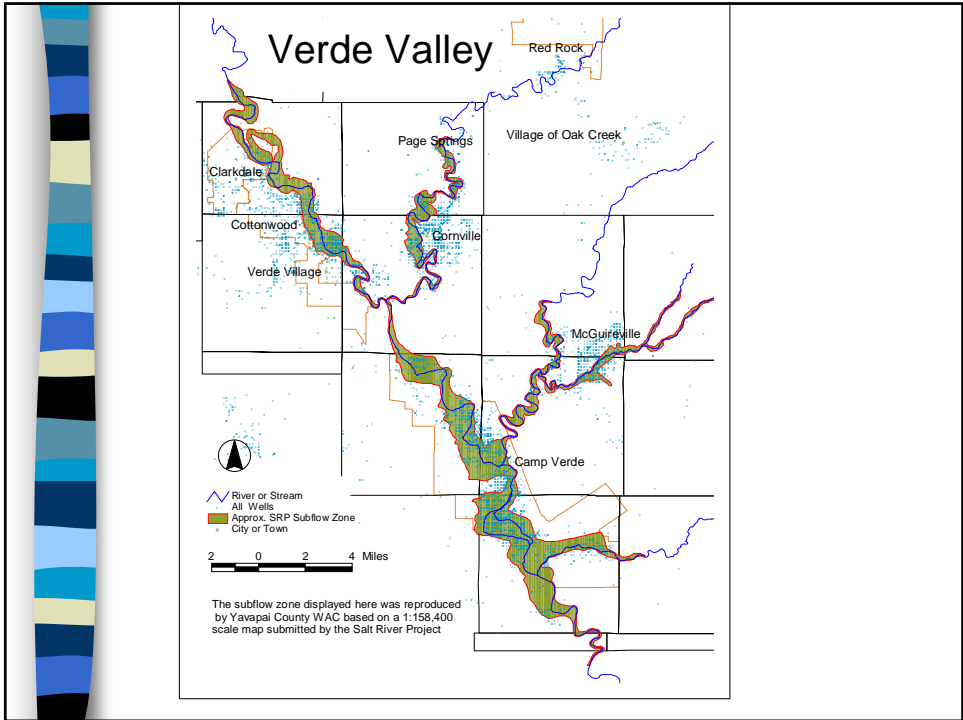
## Switch Jurisdictional Standards

- Well Owners who understood that their water right was for Groundwater may now need a Surface Water right.
- Problem: Surface Water is subject to Prior Appropriation standard, not just beneficial use.
- Senior Water Rights have to be satisfied first.

## Subflow – Loosely Defined by AZ Supreme Court

- Wells in the saturated Holocene Alluvium are in the “subflow zone” and are pumping surface water and need a surface water right.
- Large wells outside the “subflow zone” may also be impacting the stream.
- Creates an administrative area that may not be related to actual facts.







## The Subflow Process

- The Arizona Department of Water Resources must file a Technical Report on March 29.
- Claimants can file a Brief in Response by May 13.
- The Court will then decide on the Technical Standards for defining the “subflow zone”, Cone of Depression, etc.
- Subflow zones will then be delineated in the San Pedro, Verde, and other river systems.

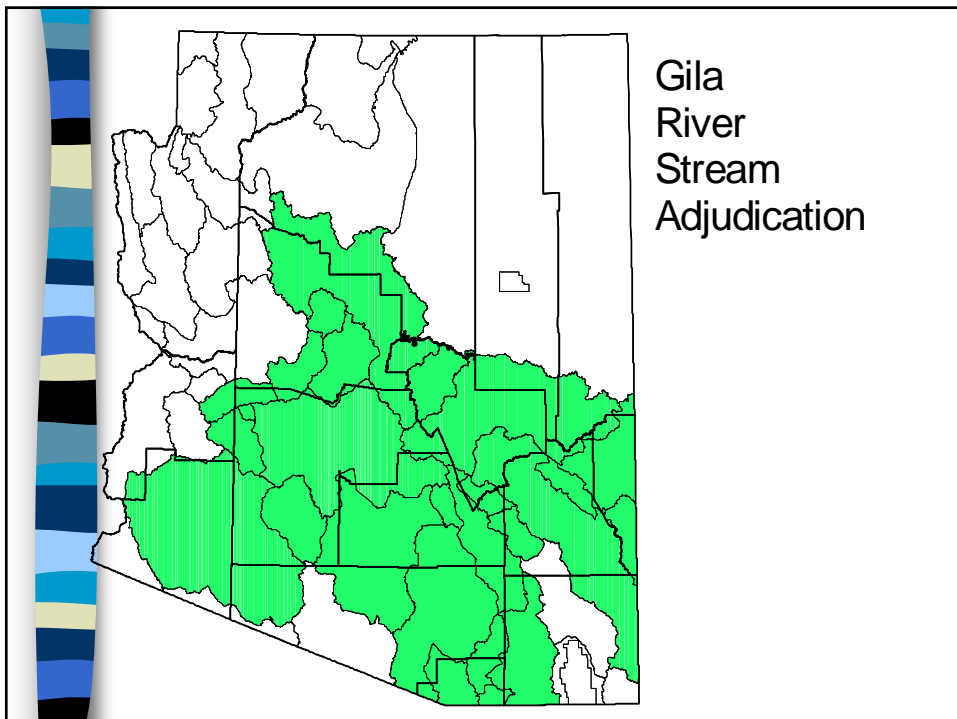


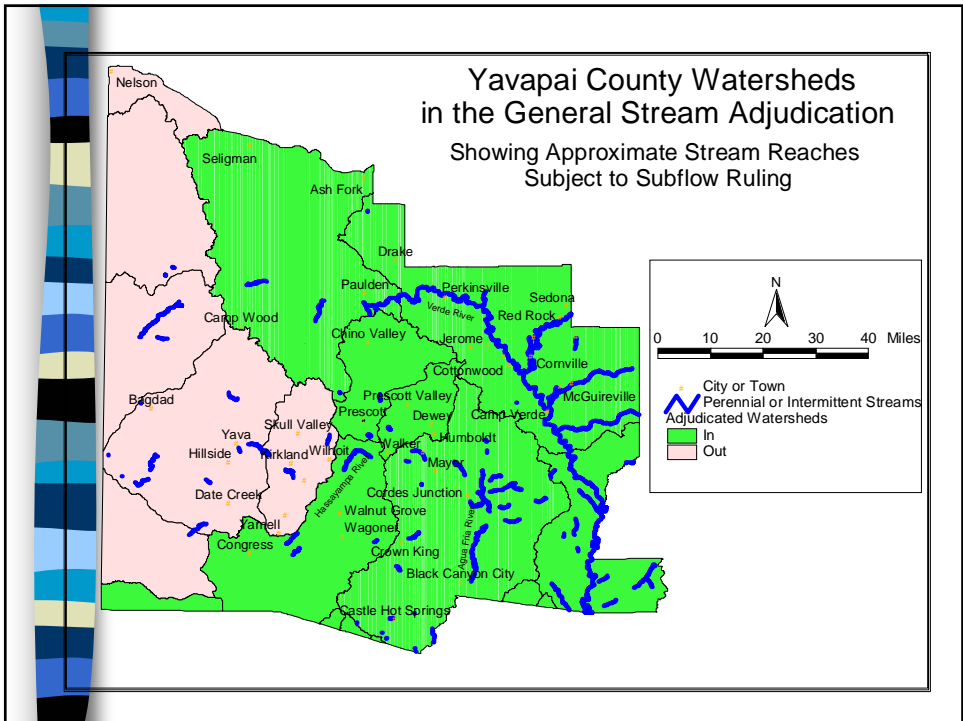
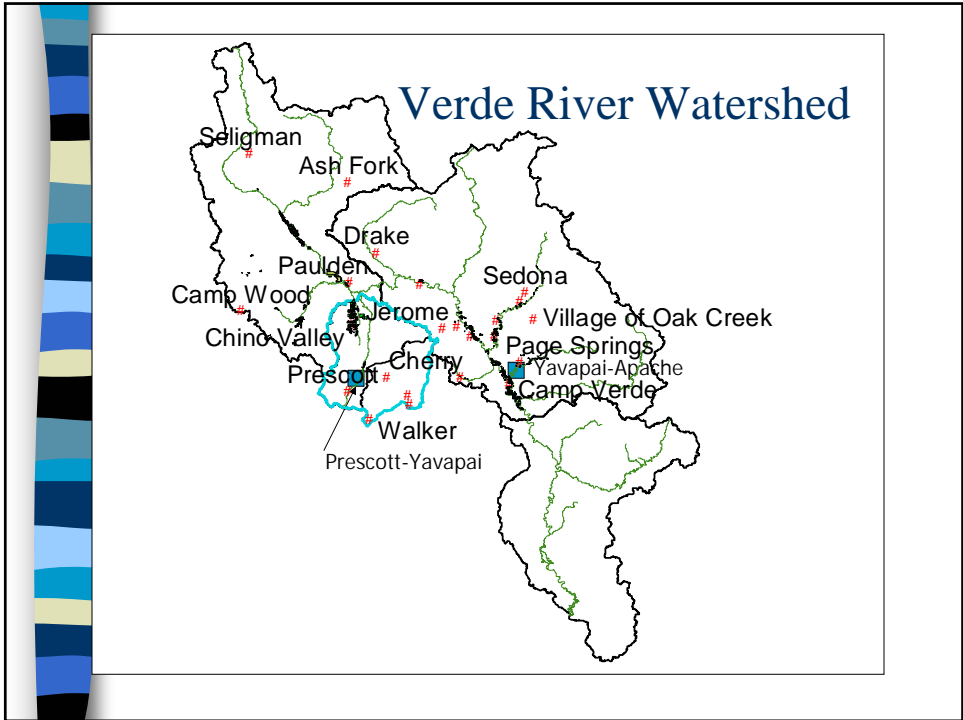
## “Subflow is a product of the Gila River Adjudication

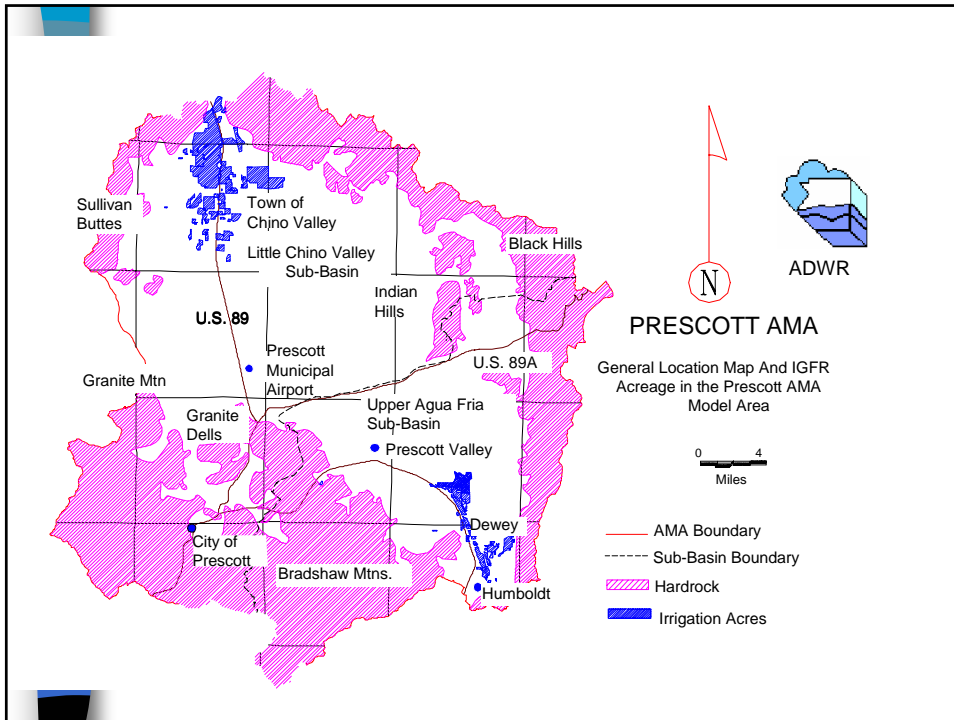
- Goal: define the relative extent and priority of all water rights within the Gila River system.
- Why? Senior appropriators feel their “first in time” rights are being infringed.
- Initiated mid-1970’s
- 25-30,000 claimants, 70,000+ claims.
- Progress to date: Interlocutory appeals and Indian Water Right Settlements.

## Interlocutory Appeal Issue No. 2

- AKA “Subflow Issue”
- Does pumping “groundwater” from wells impact senior surface right holders by depleting the stream?
- Attempt to bring together bifurcated water law through scientific principles.







## Water Rights - AMAs

- Groundwater Rights in Prescott AMA
  - Irrigation Grandfathered Right (IGFR)
    - Type 1
    - Type 2
    - Exempt Wells
- Alternative Water Supplies
  - Surface Water (subject to prior approp.)
  - Effluent Credits
  - Assured Water Supply Credits