



Moving Toward Greater Water Certainty

Arizona's Stream Adjudications

**ASU[®] Kyl Center for Water Policy
at Morrison Institute
Arizona State University**

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Surface water rights are special

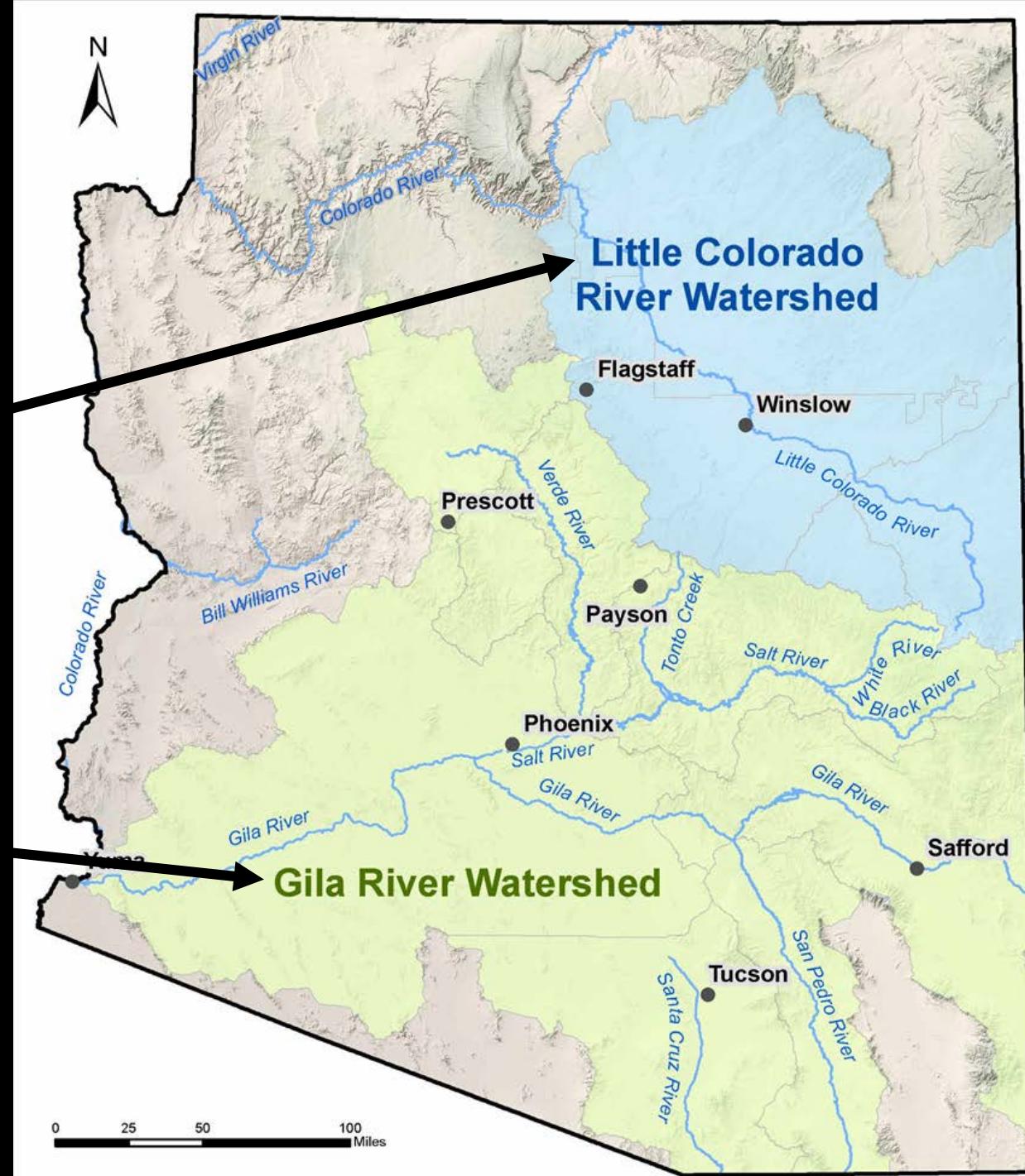
- Priority date
- Quantity
- Point of diversion





est. 1978
6,000 claimants
14,000 claims

est. 1974
40,000 claimants
85,000 claims



Why have the
adjudications taken
so long?

Foundational Legal Questions, 1983-1999

Arizona v. San Carlos Apache Tribe (U.S. Supreme Court 1983): upheld state court jurisdiction to adjudicate Indian water rights where U.S. is properly joined as a party and the state has adequate expertise and technical resources to adjudicate the claims.

U.S. v. Superior Court (Ariz. Supreme Court 1985): rejected state constitution-based challenges to state court jurisdiction and ADWR's role as technical advisor.

San Carlos Apache Tribe v. Superior Court (Ariz. Supreme Court 1999): invalidated 1995 amendments to adjudication statutes on grounds they violate the separation of powers doctrine or impair vested property rights.

The *Gila Decisions*, 1992 - 2012

Gila I: Upheld **constitutionality of service of summons and other adjudication procedures to assure due process**

Gila II & IV: Established criteria to determine whether certain wells withdraw **subflow subject to the jurisdiction of the adjudication**

Gila III: Upheld **Federal reserved water rights to groundwater** under certain circumstances

Gila V: Clarified criteria to quantify **water rights for Indian reservations**

Gila VI: Held that 1935 **Globe Equity Consent Decree** has preclusive effect on Indian claims to Gila River mainstream but not tributaries in the Upper Gila subwatershed

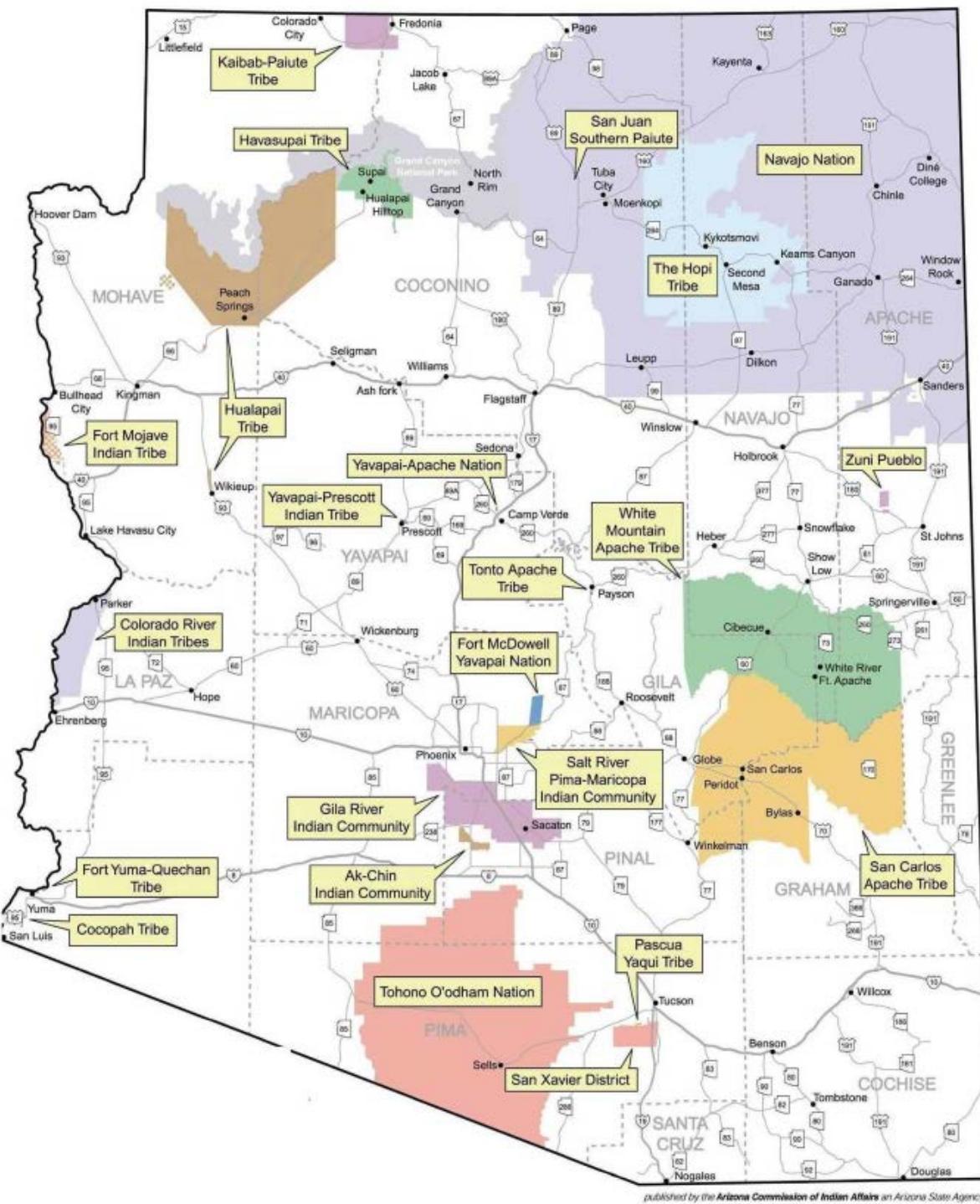
Gila VII & VIII: Approved **Indian water rights settlements** (Tohono O'odham and Gila River Indian Community)

Gila IX: Held that **State Trust Lands** are not entitled to federal reserved water rights



22 Arizona Tribes

- federal reserved rights
- multi-party settlements
- federal legislation



The subflow issue

Water withdrawn from near a river or stream



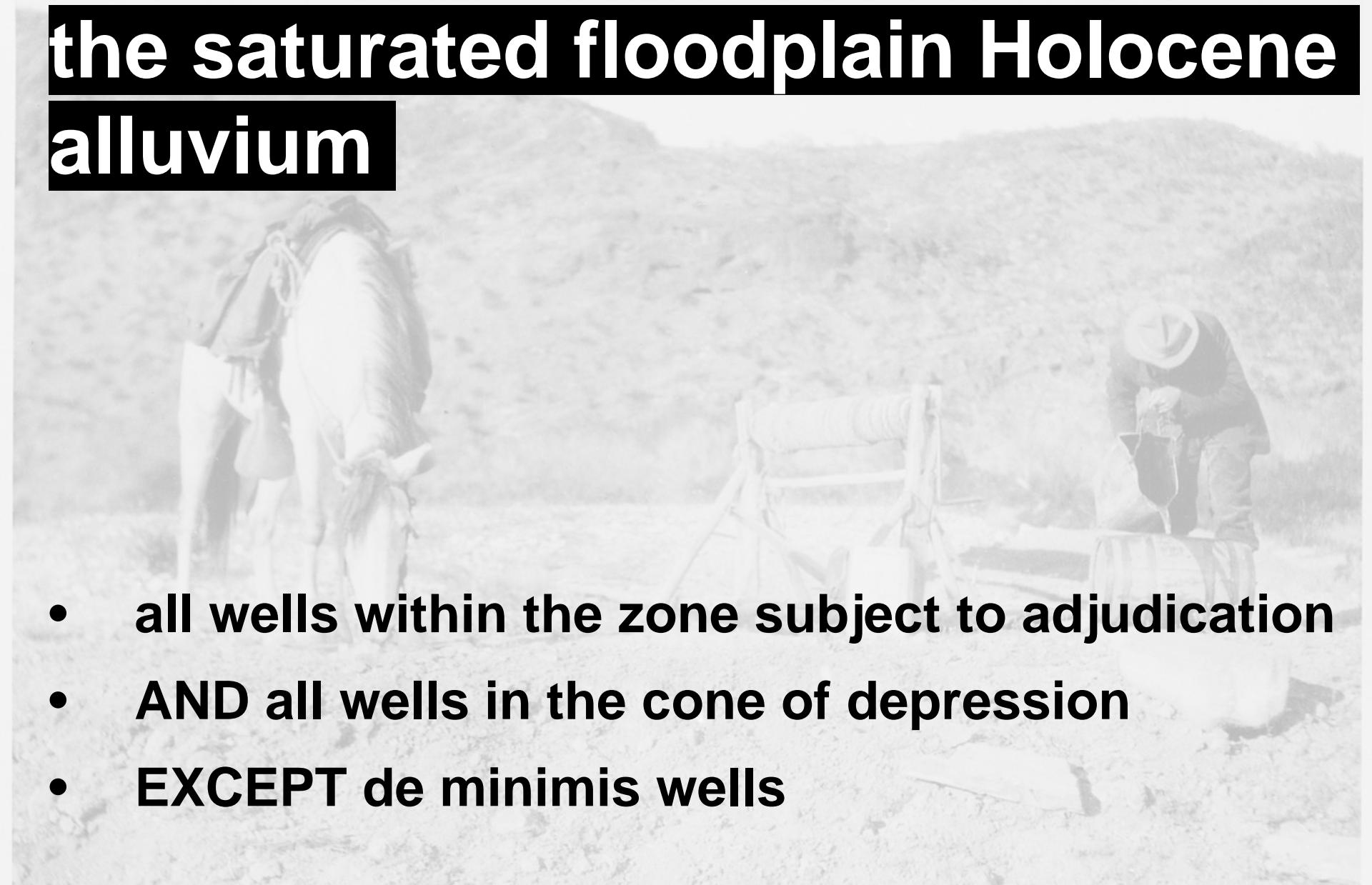
“Under Arizona's bifurcated system of managing surface and groundwater, the concept of subflow serves to protect appropriable surface water rights against interference caused by the pumping of groundwater. Because water is a very precious and limited commodity in Arizona, much turns on how ‘subflow’ is determined.”

Gila IV (2000)

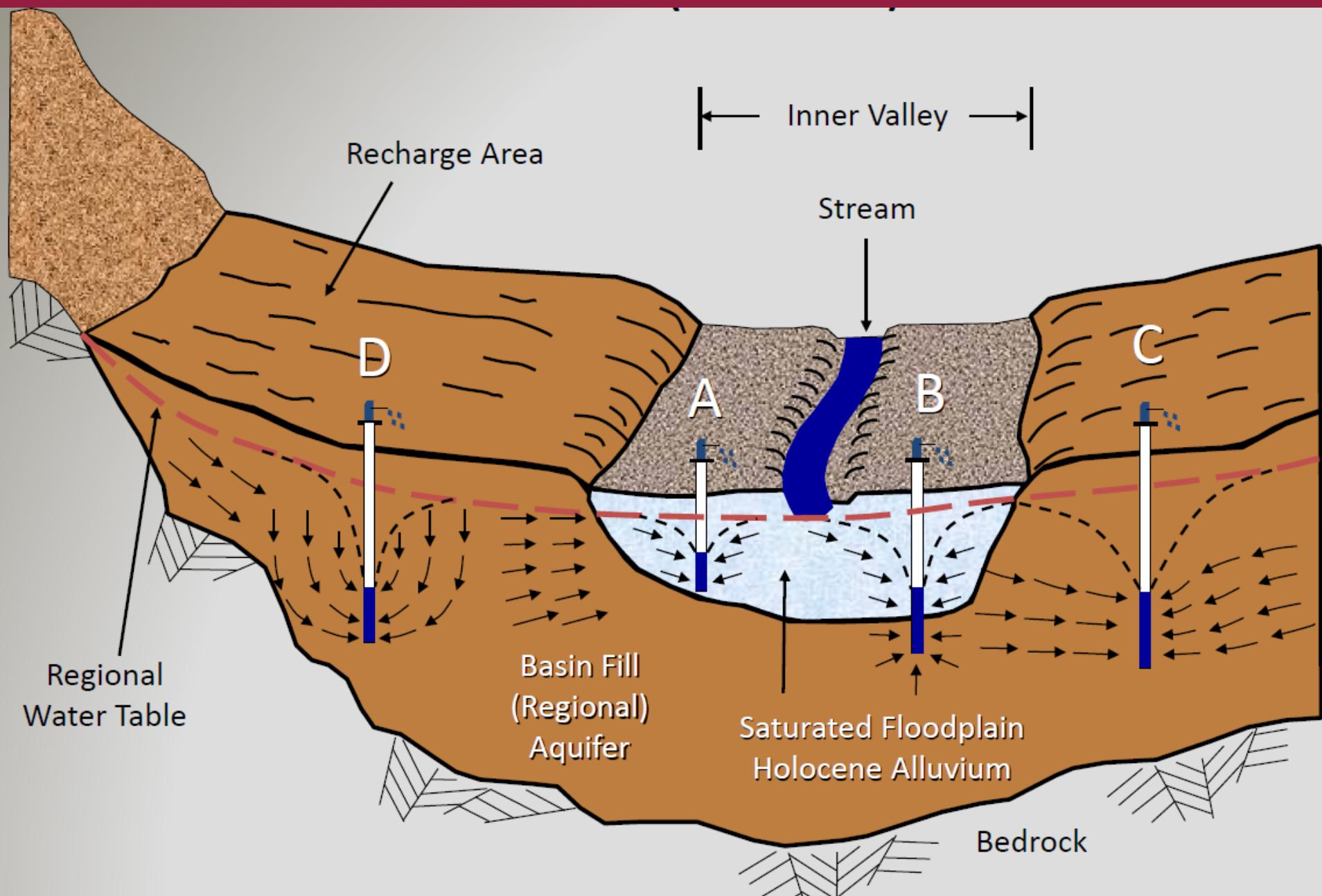


What is “subflow”?

the saturated floodplain Holocene alluvium



- all wells within the zone subject to adjudication
- AND all wells in the cone of depression
- EXCEPT de minimis wells



“This Court’s perception is that law surrounding ‘subflow’ has proven to be the root cause of the delay.”

Judge Brain, Minute Entry, June 2013



2002 - ADWR files San Pedro Subflow Technical Report

2005 - Superior Court approves ADWR's subflow methodology

2008 - ADWR files plan to update San Pedro HSR

Progress on Subflow

2009 - ADWR files Initial San Pedro Subflow Delineation Report

2010 - ADWR submits SPRNCA Land Ownership Report

2014 - ADWR files Revised San Pedro Delineation Report

2015 - ADWR files Supplemental Delineation Report

2017 - Court approves San Pedro Subflow Zone Delineation

What are the implications?

water uncertainty

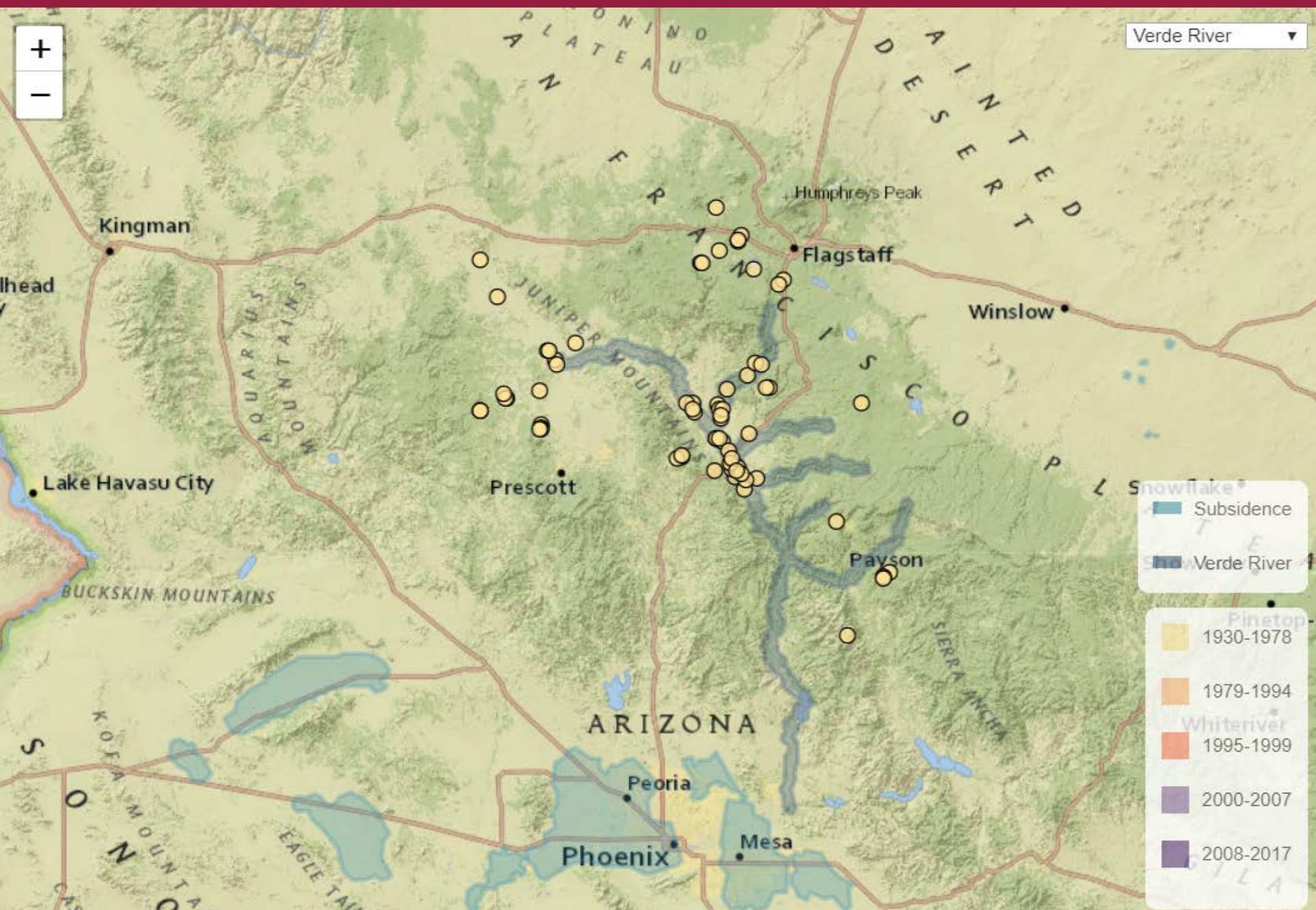
Delay makes the problem worse.



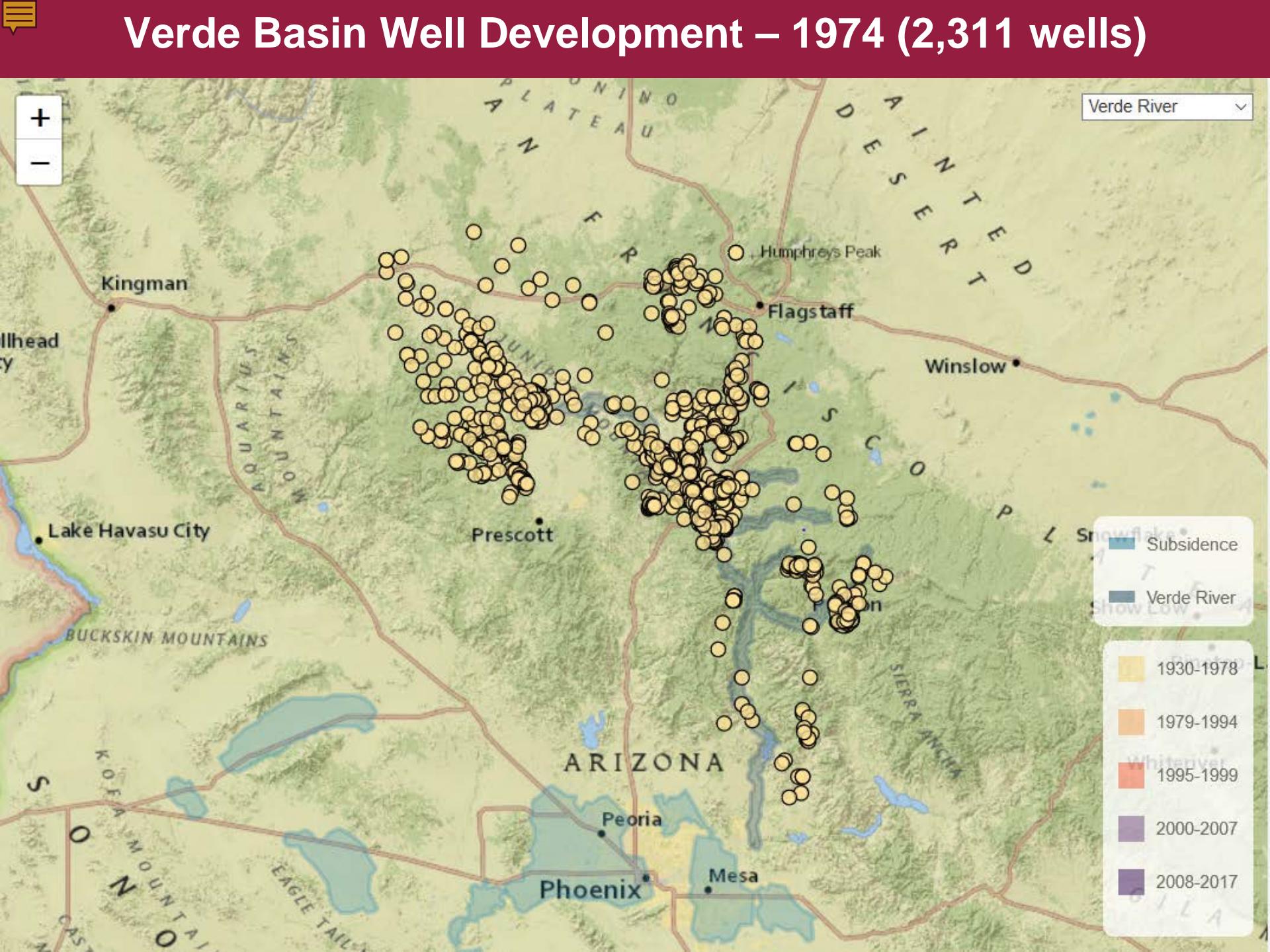
Verde Basin Well Development – 1919 (72 wells)



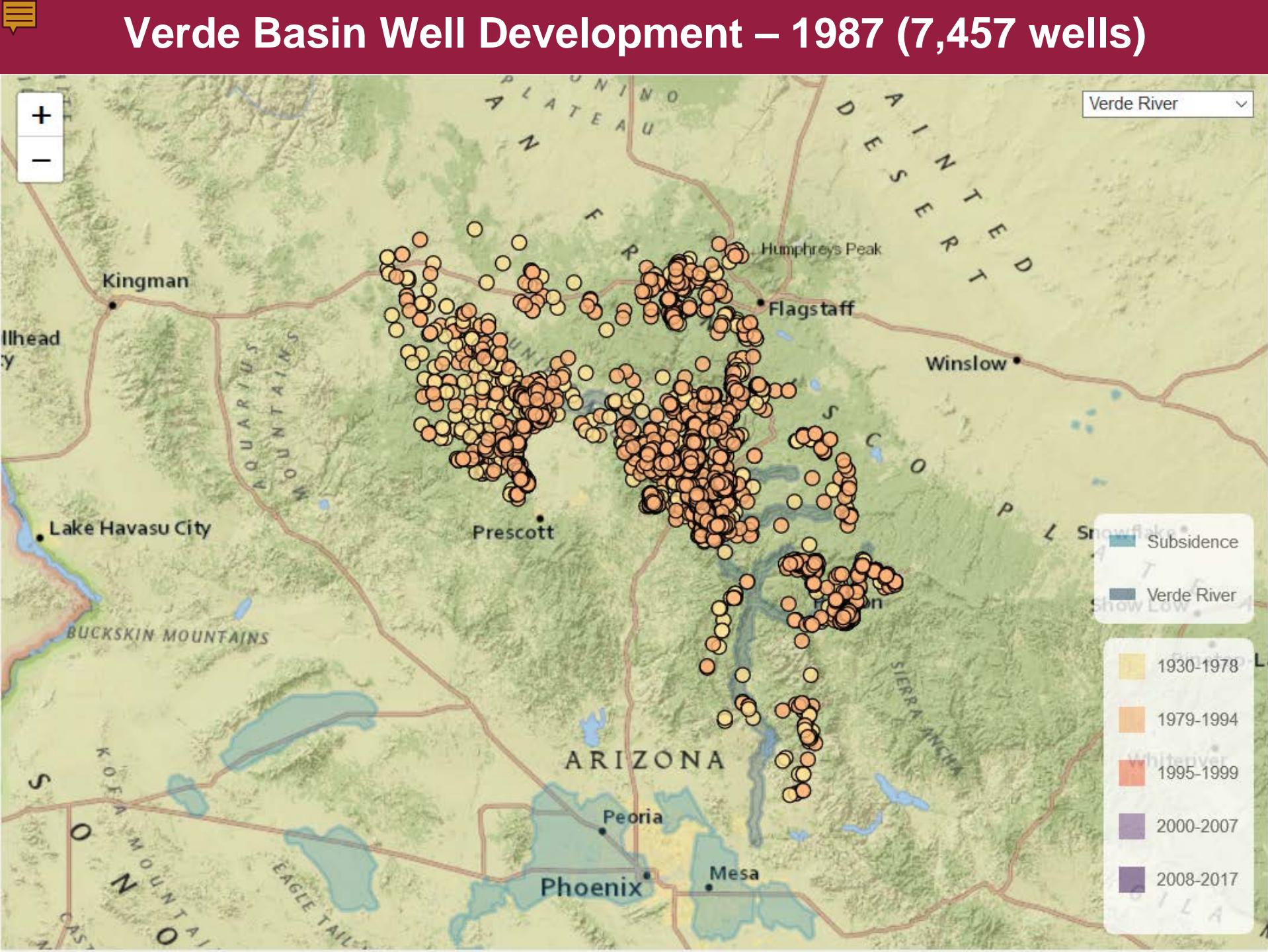
Verde River



Verde Basin Well Development – 1974 (2,311 wells)



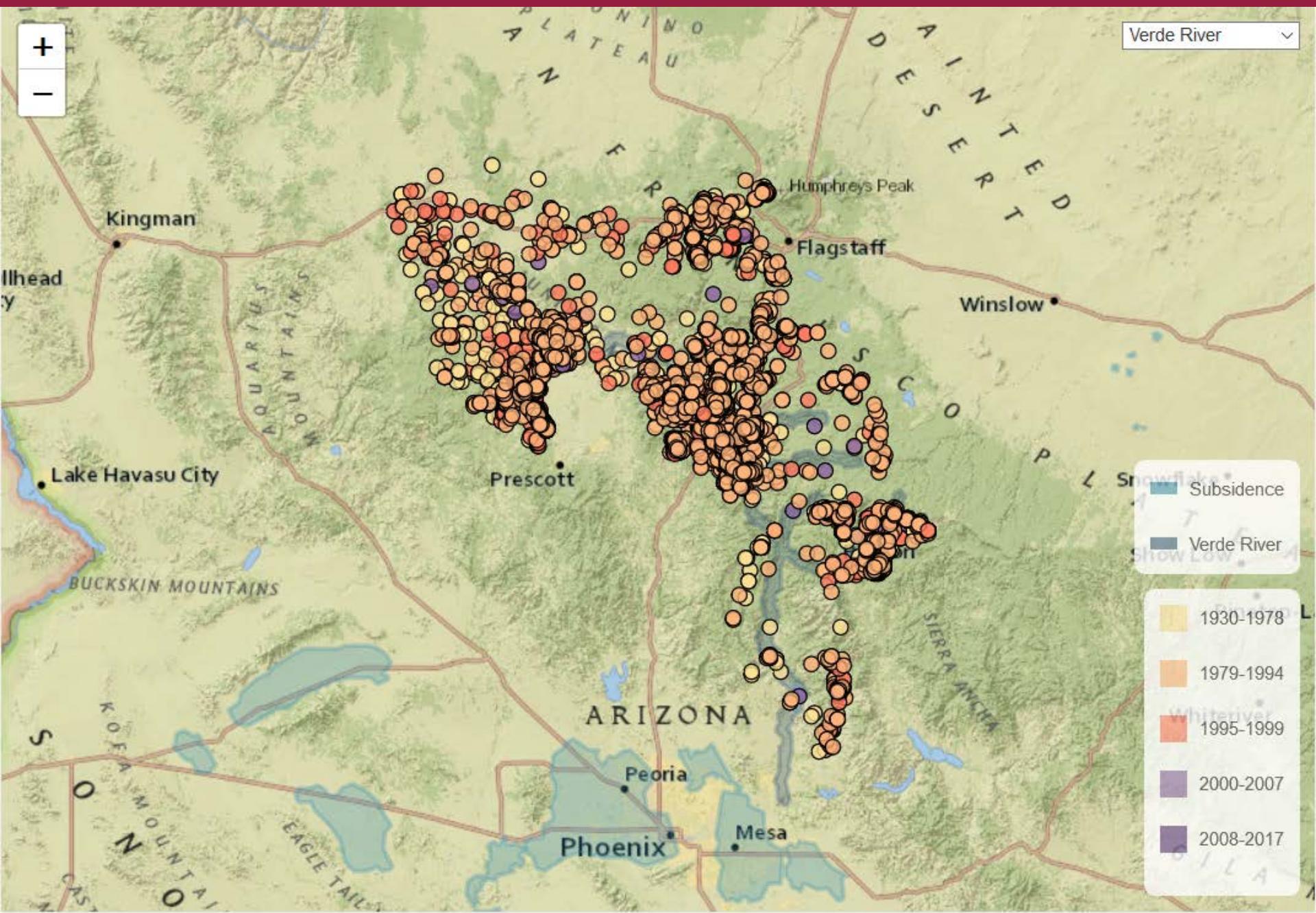
Verde Basin Well Development – 1987 (7,457 wells)



Verde Basin Well Development – 2000 (13,119 wells)



Verde River



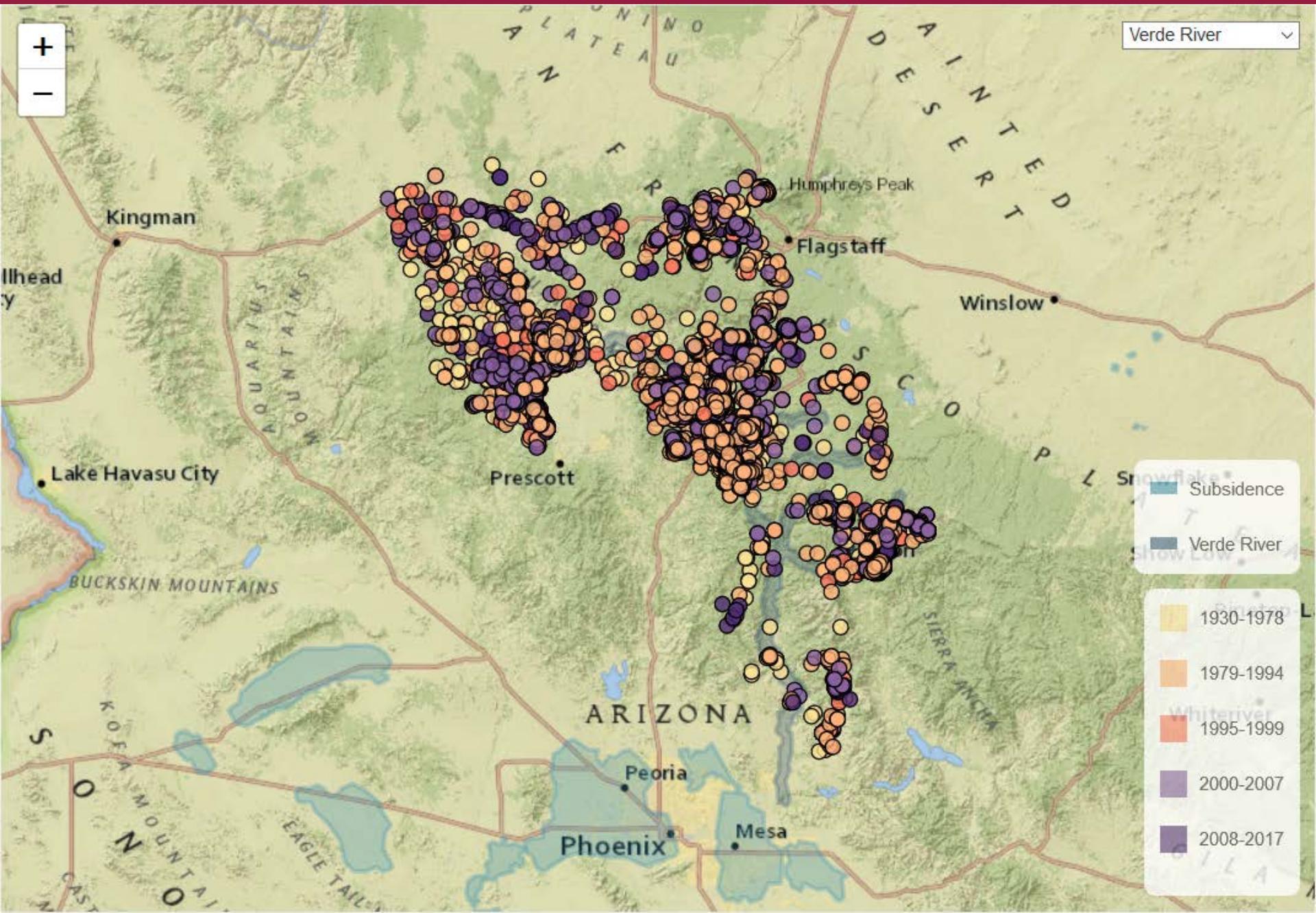
Verde Basin Well Development – 2017 (17,754 wells)



+

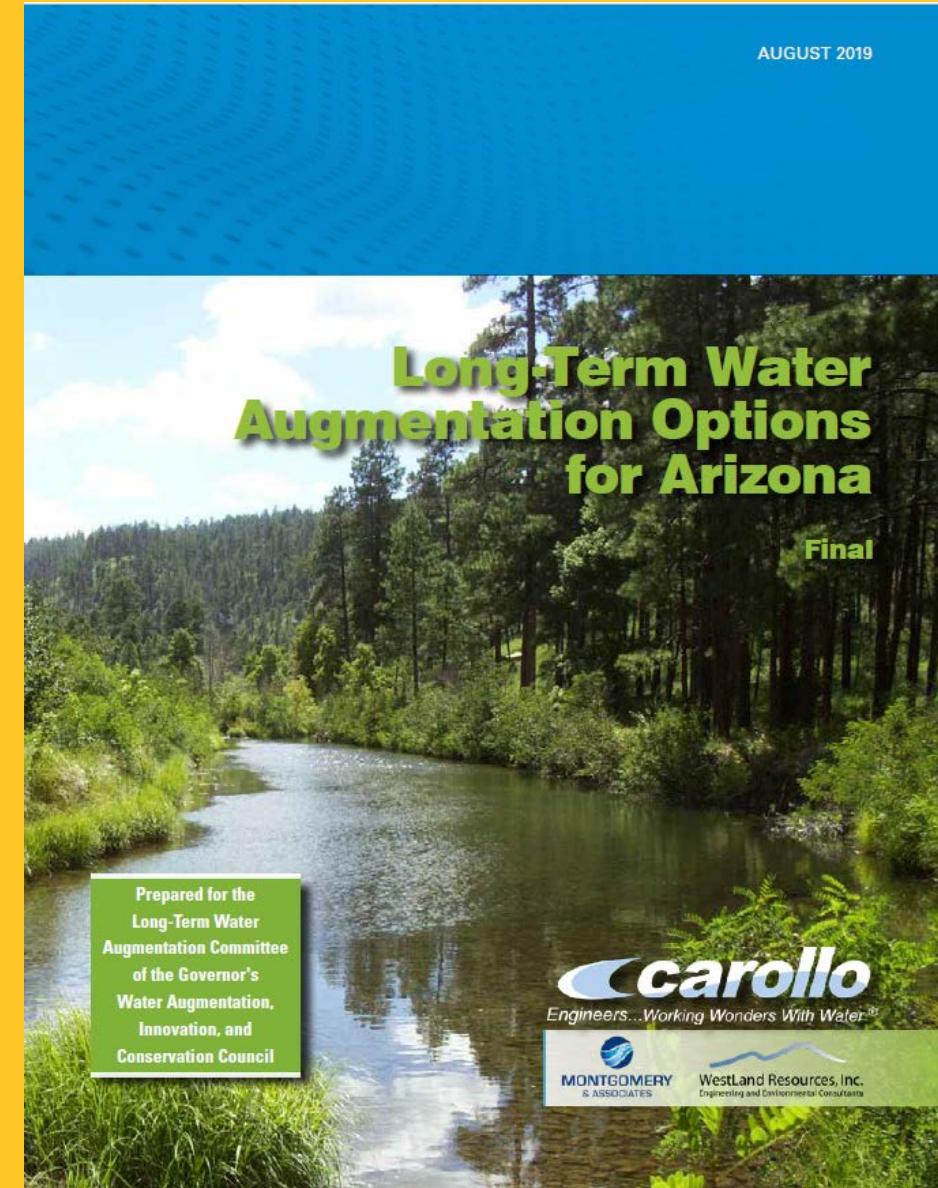
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Verde River



Why it's important to resolve the Adjudications

“During the evaluation, barriers to water augmentation were also identified. These barriers in most cases prevent utilization of existing water supplies, and therefore require attention to resolve. These barriers include the ongoing Gila River and Little Colorado River adjudications, Indian water right claim settlements, and lack of rural area groundwater management and planning.”





“Until that process is complete, **uncertainty** regarding the nature, extent and priority of water rights will make it **difficult** to identify **all the strategies necessary** for meeting projected water demands.”



***Arizona's Next
Century: A Strategic
Vision for Water
Supply Sustainability
(2014)***

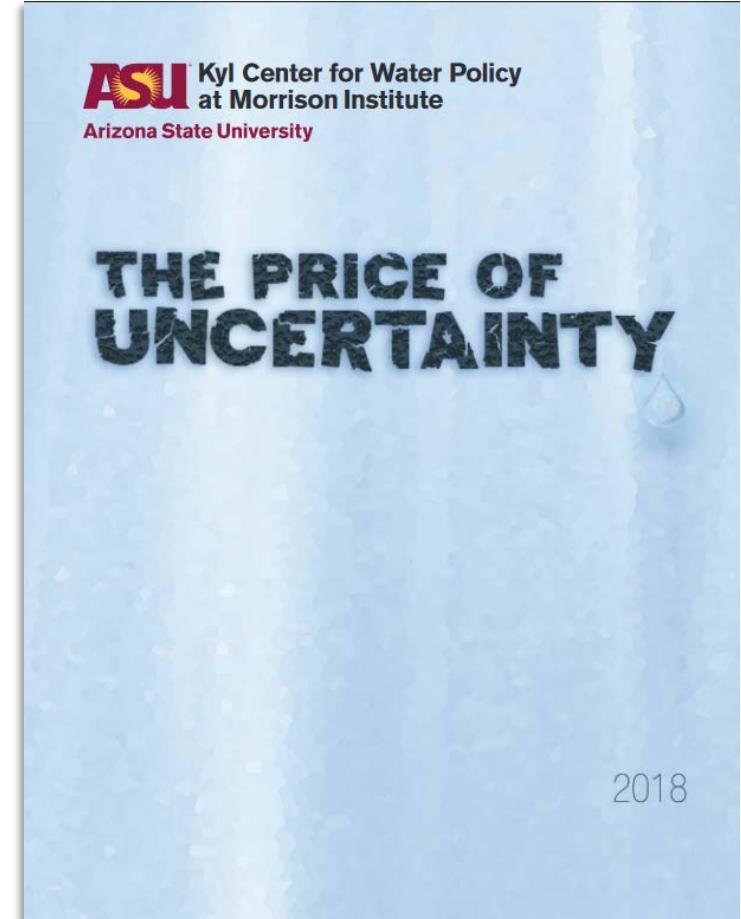


The Kyl Center's Adjudication Reform Efforts

Adjudication Related Work

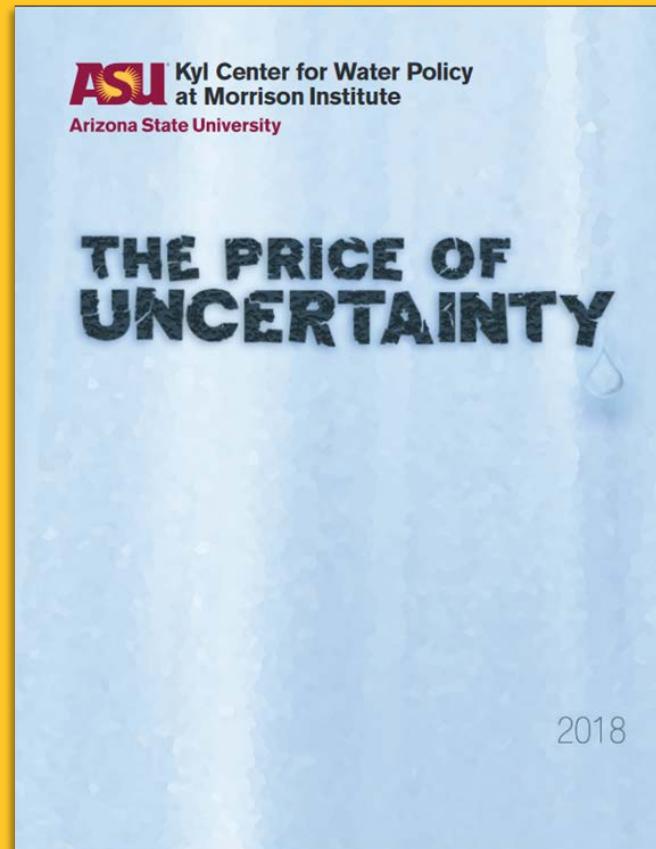
- **Adjudication Reform Committee**
- ***The Price of Uncertainty***
- ***Investing in Certainty****
- **Ongoing Outreach**

*publication pending, fall 2019



What kind of “water certainty”

does a community need to have to
attract investment?



Are investors more concerned about water these days?

Yes

	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Developers	16	1*	2
Consultants	6	1	1
Attorneys	1		2

* “Water has always been a top concern.”

**If there's a question about the
site, we take it off the list.**

Site Location Consultant

Have you ever decided not to invest in a site because of concerns about water?

	<u>Yes</u>	<u>No</u>
Developers	11	7*
Consultants	1	7**

***Of the 7 developers who responded no, all but one stated that they work exclusively within AMAs or that such a property would “self eliminate” or both.**

****Of the 7 site consultants who responded no, all stated that such a property would “self eliminate.”**

Adjudication Reform Committee

- **Development of Proposed Special Procedural Order for Settling State Law Claims**
- **Extensive discussions of concepts for settling subflow disputes at the basin scale**
- **Water Managers' Concept for Addressing Subflow**

Key Concepts Discussed

Settling Claims in the Adjudication

Grandfathering current well owners

Limiting development of new wells

Transferability of well rights

Options for mitigation

Water rights “escrow” program

Closing thoughts . . .

Lack of understanding of the adjudication is a major impediment to resolving claims.

Delay in resolving the adjudication serves neither existing nor future water users.

With most of the major foundational issues out the way, greater investment in court and ADWR adjudication staffing and resources is merited and will hasten the adjudication process.

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Wells 55 interactive map
<http://water.dtn.asu.edu/>



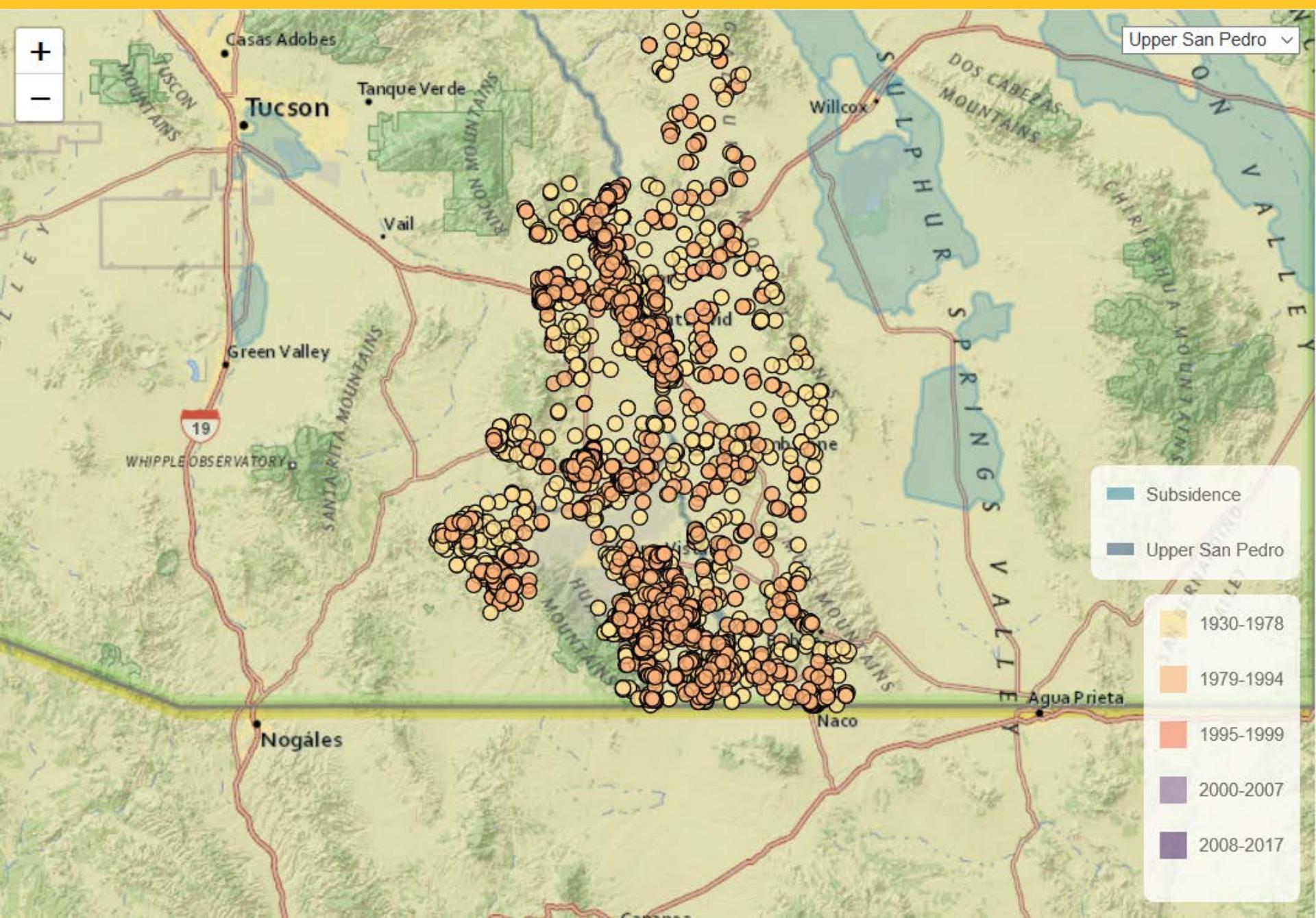
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Subflow in the Upper San Pedro

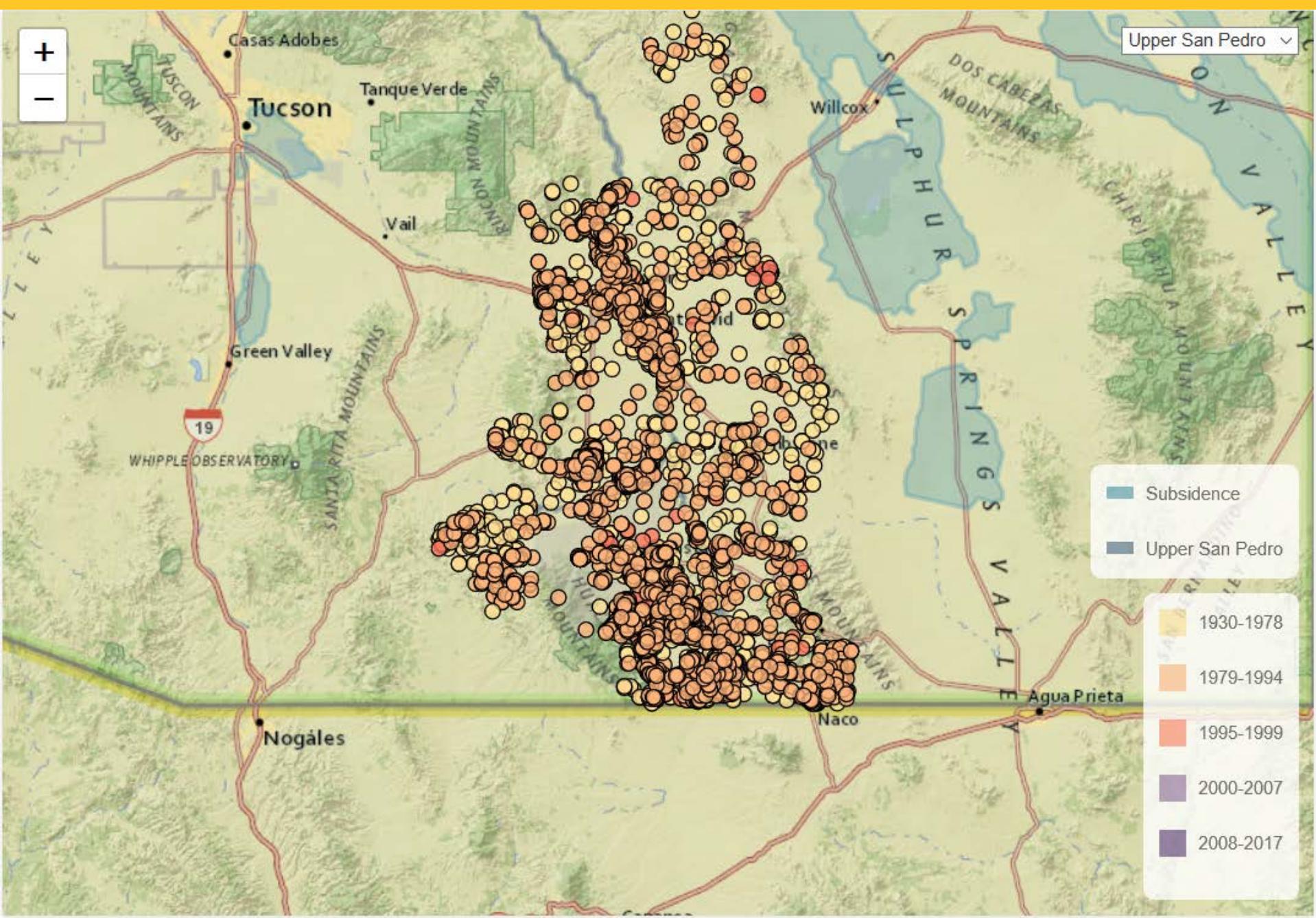


Upper San Pedro Basin – 1987 Well Development (3,592 wells)



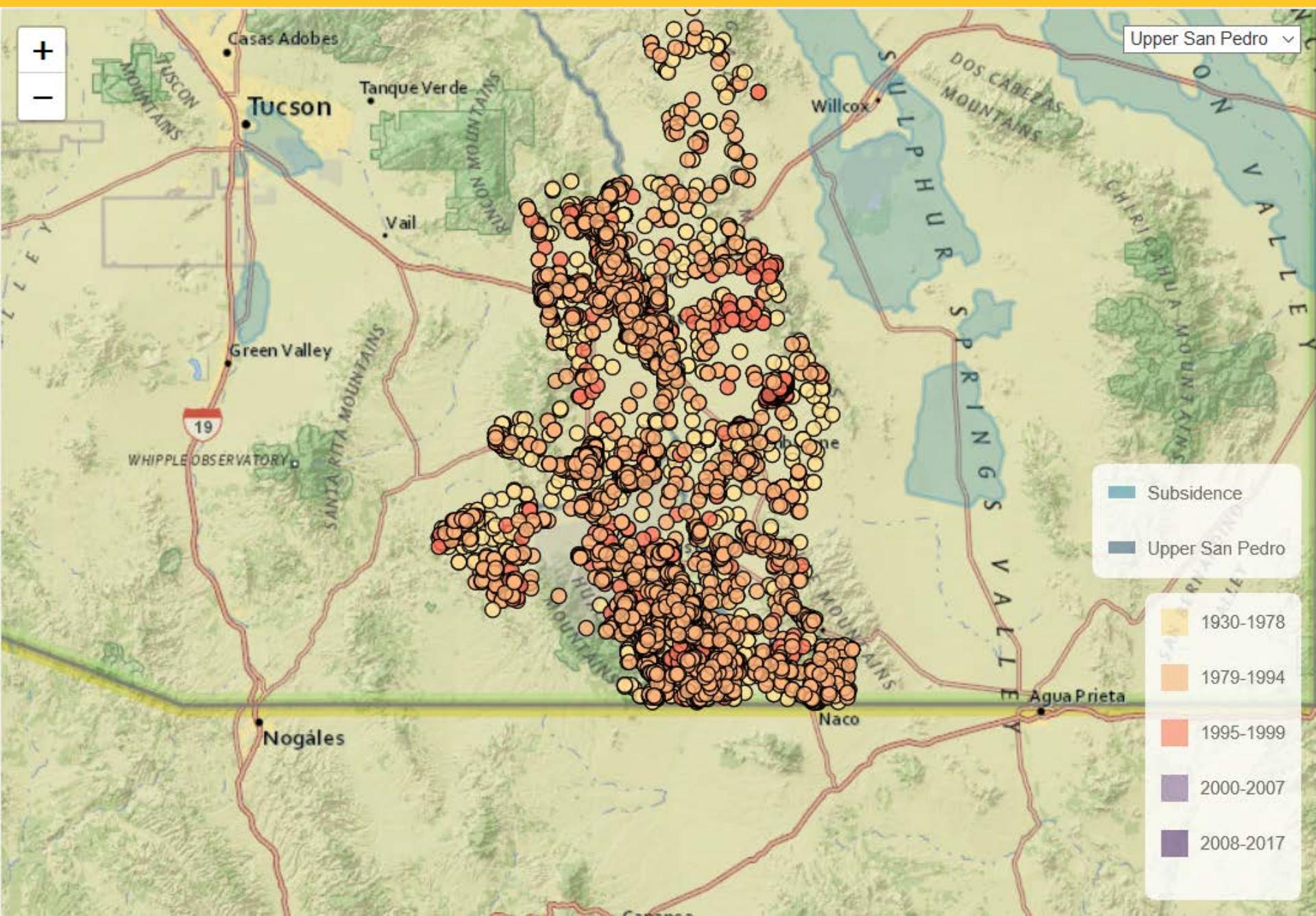


Upper San Pedro Basin – 1995 Well Development (5,104 wells)



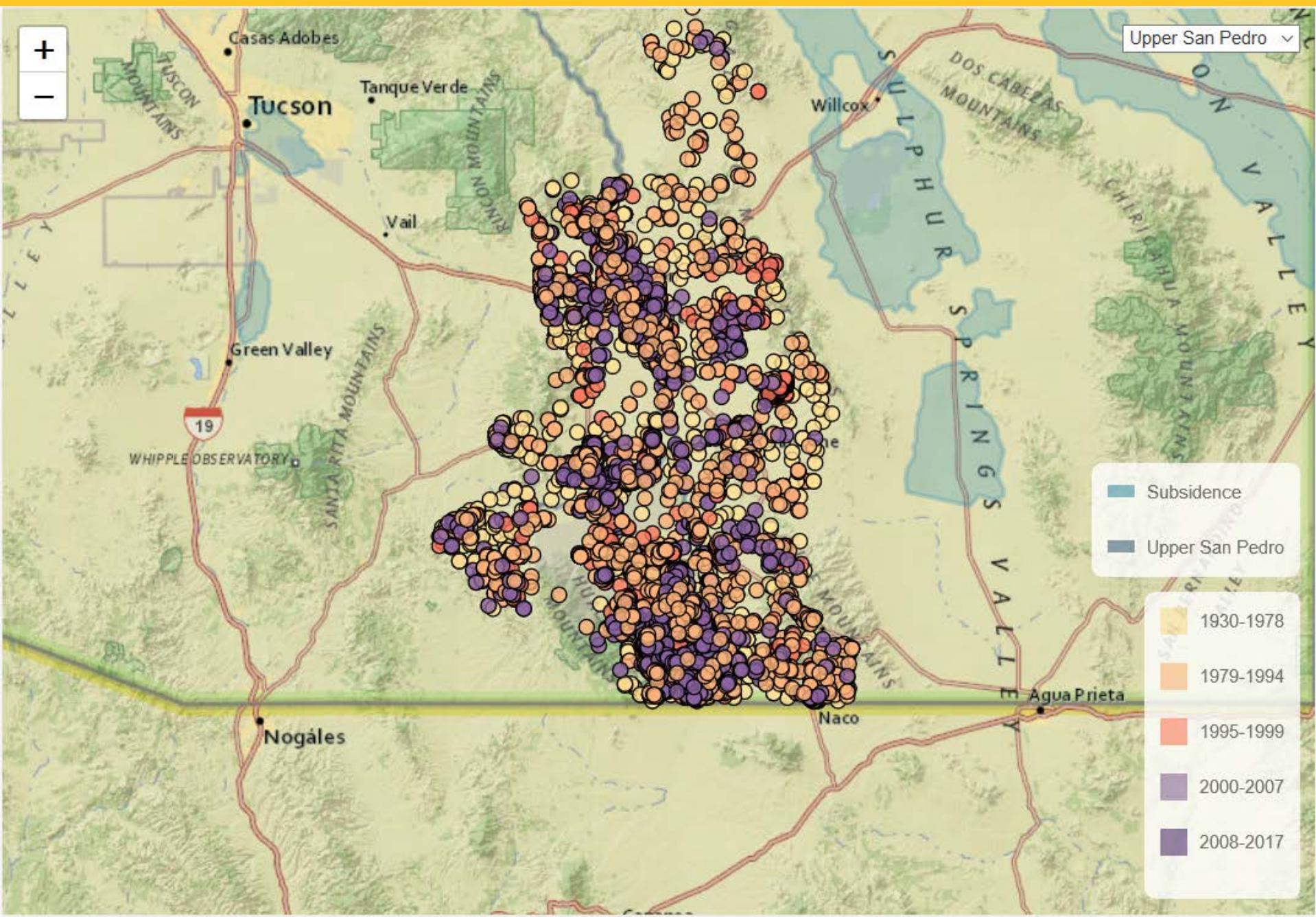


Upper San Pedro Basin – 2000 Well Development (6,113 wells)



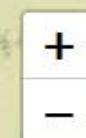


Upper San Pedro Basin – 2005 Well Development (7,585 wells)

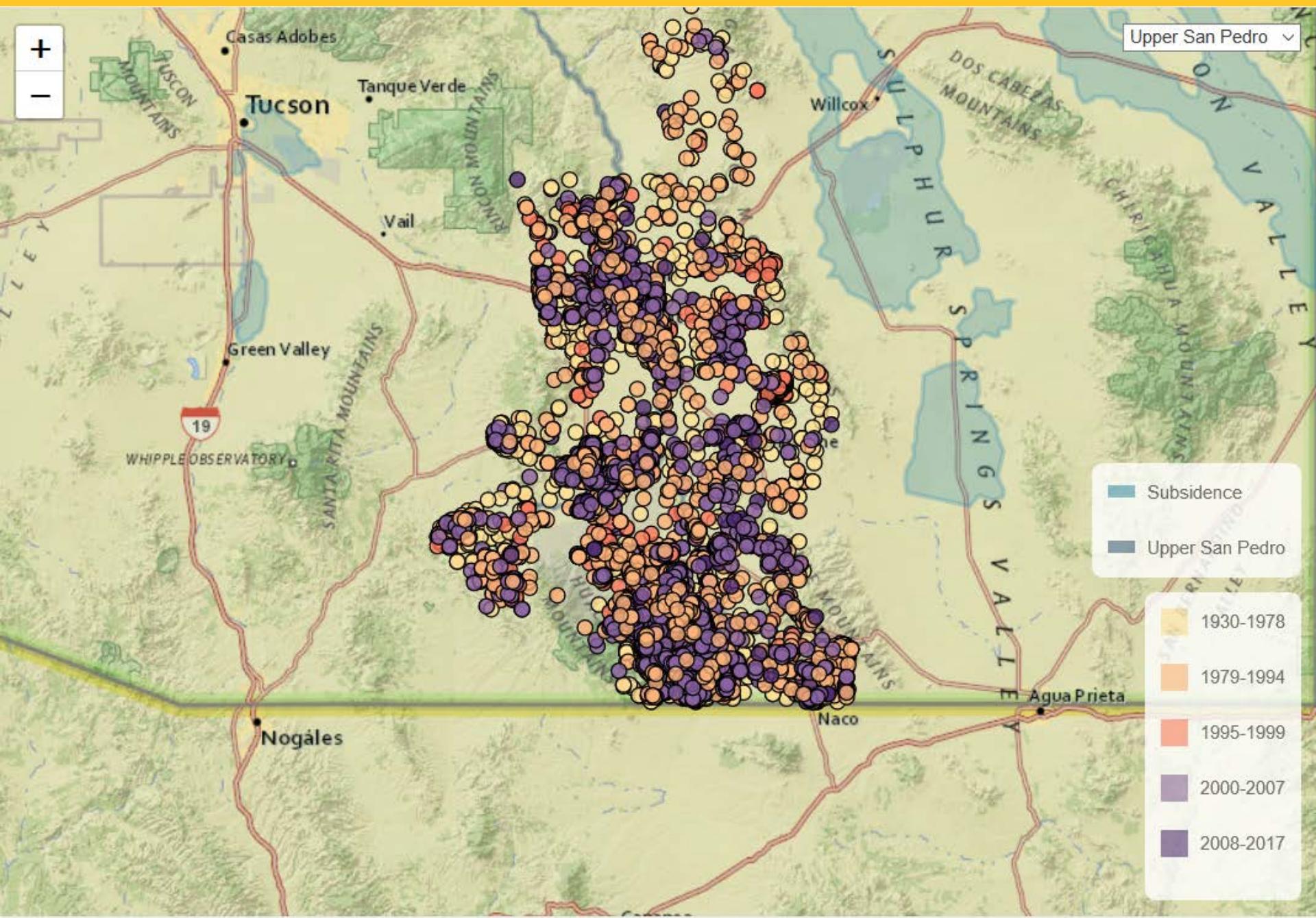




Upper San Pedro Basin – 2012 Well Development (8,510 wells)



Upper San Pedro





Upper San Pedro Basin – 2017 Well Development (8,765 wells)

