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SLIDES: Survey of Indian Groundwater Issues

Rodney B. Lewis

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Survey of Indian Groundwater Issues

Groundwater in the West
25th Summer Conference
Natural Resources
Law Center
June 16-18, 2004

Rodney B. Lewis, General Counsel
Gila River Indian Community
Introduction

1. I am participating today as a practitioner not on behalf of the Gila River Indian Community.

2. I bring a unique perspective as an in-house counsel for an Indian tribe.

3. I have worked directly for a tribal council for over 30 years and speak from the context of a tribal community.
Historical perspective

1. The Gila River Indian Reservation was established by Congress in 1859.

2. Pimas (Akimel-O’Odham) and Maricopas (Pee-Posh) comprise the tribes of the Community.

3. Our ancestors, the ancient HuHuKam, farmed the Gila and Salt River Valleys before 300B.C.
4. Over 500 miles of canals were dug to irrigate our fields.

5. Diversion of water upstream on the Gila River caused famine and drought beginning in the 1880s.

6. Pimas and Maricopas have the highest documented rate of diabetes of any ethnic group in the world.
Years of Litigation

- The Gila River Indian Community’s claims for water and damages have been litigated for more than 100 years.
- Litigation has been costly to all parties.
- Rights to water in central Arizona are uncertain for all water users pending the outcome of litigation.
Striving for Settlement

- Gila River Indian Community, in good faith, has negotiated a water settlement. This process has taken over 20 years.

- For the past 7 years, the Community, Federal and non-Indian parties have participated in an especially concerted effort to structure and draft a settlement agreement document.
Historically Irrigated Acres
<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground Water</td>
<td>156,700</td>
</tr>
<tr>
<td>Globe Equity Decree Water</td>
<td>125,000</td>
</tr>
<tr>
<td>Community CAP Indian Priority Water</td>
<td>173,100</td>
</tr>
<tr>
<td>RWCD CAP Water</td>
<td>18,600</td>
</tr>
<tr>
<td>RWCD Surface Water</td>
<td>4,500</td>
</tr>
<tr>
<td>HVID CAP Water</td>
<td>18,100</td>
</tr>
<tr>
<td>ASARCO CAP Water</td>
<td>17,000</td>
</tr>
<tr>
<td>SRP Stored Water</td>
<td>20,000</td>
</tr>
<tr>
<td>Chandler Contributed Reclaimed Water</td>
<td>4,500</td>
</tr>
<tr>
<td>Chandler Reclaimed Water Exchange Prem.</td>
<td>2,230</td>
</tr>
<tr>
<td>Mesa Reclaimed Water Exchange Prem.</td>
<td>5,870</td>
</tr>
<tr>
<td>New CAP NIA Priority Water</td>
<td>102,000</td>
</tr>
<tr>
<td>Haggard Decree Water</td>
<td>5,900</td>
</tr>
</tbody>
</table>

**Water Budget**  
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**653,500**
### Water Budget Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Supply</td>
<td>460,700</td>
</tr>
<tr>
<td>Pending in Settlement</td>
<td>192,800</td>
</tr>
<tr>
<td>Community Water Budget</td>
<td>653,500 AFY</td>
</tr>
</tbody>
</table>
Current Water Delivery Problems
ARIZONA WATER RIGHTS SETTLEMENT
ARIZONA WATER RIGHTS SETTLEMENT
Buffer Zone-Pumps Off-Reservation
A. SINGLE CONE OF DEPRESSION

- WATER TABLE
- SMALL DOMESTIC WELL
- CONE OF DEPRESSION
- REGIONAL AQUIFER
- SAN PEDRO RIVER
- FLOOD-PLAIN AQUIFER
Coolidge Dam (San Carlos Reservoir) on the Gila River near Winkelman, Arizona
Unsaturated zone

Saturated zone

Ground water

Water table

Surface water

Land surface

Creviced rock

Gravel

Air

Water (not ground water) held by molecular attraction surrounds surfaces of rock particles

Approximate level of the water table

All openings below water table full of ground water
Federal reserved water rights doctrine applies not only to surface water but also to groundwater.

Holders of federal reserved water rights may invoke federal law to protect their groundwater from subsequent diversion even if the holders would enjoy greater protection than holders of state law water rights.
Yet the notion of subflow is an artifice, as we acknowledged in Gila River II, that rests on a hydrological misconception. (cite omitted) To pump well water from “lands under or immediately adjacent to a stream” IS NOT, we now know, the ONLY PUMPING that may significantly diminish surface water.
Gila III - Federal and Indian Claims

1. Two thirds of the land is federal and Indian held.

2. State courts must apply federal substantive law to measure federal rights in state adjudications.

3. The federal reserved rights doctrine applies not only to federal enclaves but also Indian reservations.
Gila III-Federal Reserved Rights Extend to Groundwater

▶ In the *Big Horn* case the Wyoming Supreme Court declined to find a reserved right to groundwater. 753 P. 2d 76, 1988

▶ The *Winters* case, 207 U.S. 564 (1908) held that the United States in setting aside land for a reservation, the government implicitly reserved sufficient water to accomplish the reservation’s purpose.

▶ In *Cappaert*, 426 U.S. 128, 1976, the Supreme Court recognized the hydrological connection of surface water and groundwater and upheld an
an injunction restricting pumping from a private ranch that lowered a pool of water that inhibited the spawning of endangered fish in the Devil’s Hole National Monument.
Gila III-Guideposts

- In *Winters* the arid lands of the Fort Belknap could not be made “inhabitable and capable of growing crops” without an implicit reservation of Milk River water.

- In *Arizona v. California*, 373 U.S. 546, 1963 the United States when it created the Colorado River Indian Reservation obviously knew that “most of the lands were of the desert kind-hot, scorching sands,” and that water from the Colorado River was essential to growing crops.
Gila III-Guideposts

- All Indian reservations do not have access to perennial streams and many depend on pumping of underground water to sustain life.
- In *Cappoart* the court declined to differentiate between surface and groundwater when identifying the water to be protected when protecting federal rights.
Gila III-Conclusion

The United States intended, when it established reservations, to reserve sufficient unappropriated water to meet the reservations’ needs, it must have intended that reservation of water to come from whatever particular sources each reservation had at hand. For instance groundwater.
Types of groundwater rights that could be recognized

1. A recognized tribal right to withdraw a specific quantity of water.
2. The right to preclude uses of groundwater that threaten a surface water use.
3. The right to preclude another use of water that depletes an underground water source where and Indian tribe possesses
Types of groundwater rights that could be recognized (cont’d)

- a recognized or quantified water right.
- 4. The right to preclude another use of underground water because of the possibility that an Indian tribe may have a claim to the water source of underground water.
1. Can Indian tribes assert these claims without the federal government?

2. Does the federal government have a trust responsibility to act affirmatively to prevent groundwater overdraft?

3. Will a different standard be used to measure reserved rights to groundwater?
Observations and Questions

4. Can Indian reserved rights to groundwater preclude overdraft?

5. Can Indian tribes satisfy their surface water rights by pumping hydrologically connected groundwater?
Observations and Questions

6. Should analysis of wells be based on pre-development conditions and reward pumpers allegedly illegally pumping appropriable subflow desaturating the aquifer or a later date?

7. Should soils maps or actual field studies confirm the actual location of Holocene alluvium?
Observations and Questions

8. Must the saturated floodplain Holocene alluvium be saturated, and if so, when?

9. Should each well be evaluated to see if the well is pumping from the subflow?
10. Should determinations whether a well’s cone of depression intersects the subflow zone be based on field Measurements not computer simulations?