

**MANAGEMENT OF WATER  
RESOURCES IN NEVADA  
GROUND WATER - SURFACE WATER  
INTERACTION**

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Nevada historically managed  
ground water and surface water  
separately  
“for the most part”

- Surface water and ground water were and are addressed under separate provisions of Nevada’s water law.
- Chapter 533 – Adjudication of Vested Water Rights;  
Appropriation of Public Waters
- Chapter 534 – Underground Water and Wells

# HISTORICAL DATES

**1903** - STATE ENGINEER'S OFFICE CREATED – primary purpose of creating the office was to provide a method by which existing rights might be defined because reclamation work could not proceed unless existing rights on the stream sources were ascertained

**1905** - NRS CHAPTER 533 - the 1905 law amended the 1903 irrigation law by prescribing a method for appropriating water through application to the state engineer

**1907** - NRS CHAPTER 533 – declared all natural watercourses and natural lakes which were not held in private ownership belonged to the state and were subject to appropriation

**1913** - ACT SETTING FORTH COMPREHENSIVE PROCEDURES ON:

- APPROPRIATION
- ADJUDICATION
- DISTRIBUTION
- CONSERVATION OF UNDERGROUND WATERS
- EMINENT DOMAIN
- DEFINED BENEFICIAL USE
- **DECLARED ALL WATER SOURCES, WHETHER ABOVE OR BENEATH THE SURFACE OF THE GROUND, BELONGS TO THE PUBLIC**

**1939** - NRS CHAPTER 534 – Comprehensive ground-water law enacted

# PERENNIAL YIELD BELONGS TO THE GROUND-WATER BASIN

- Water recharged to ground-water basin belongs to the basin and is available for appropriation and does not belong to water right holders on an adjacent river. State Engineer recognized there are areas of hydrologic connection between the ground-water basin and the river, but local recharge belongs to the ground-water basin and may be appropriated. It is recognized that wells immediately adjacent to the river have the potential to capture river water and imposed restrictions on wells closer than  $\frac{1}{4}$  mile to the river. Ruling No. 5823
- This ruling and a like ruling in another basin are under appeal

# Cases attempting to address interaction

- *Cappaert v. United States*, 426 U.S. 128 (1976) Federal District Court issued injunction that restricted ground-water pumping from private land bordering Devil's Hole National Monument on grounds drawing water from same source as a pool within the monument which was home to an endangered fish on grounds that implied federal reserved water right was senior to ground-water pumpers rights and pumping impacting the federal reserved right
- *Griffin v. Westergard*, 96 Nev. 627 (1980) Denied an application for ground-water rights based on finding that the use of the water would impair surface-water rights
- Mineral County and Walker Lake Working Group v. WRID – trying to save Walker Lake asserting public trust doctrine and to prevent state engineer from granting any additional water rights to withdraw surface water or ground water from the Walker River system and compelling state engineer to reconsider current appropriations from the system

# SNWA Pipeline Applications

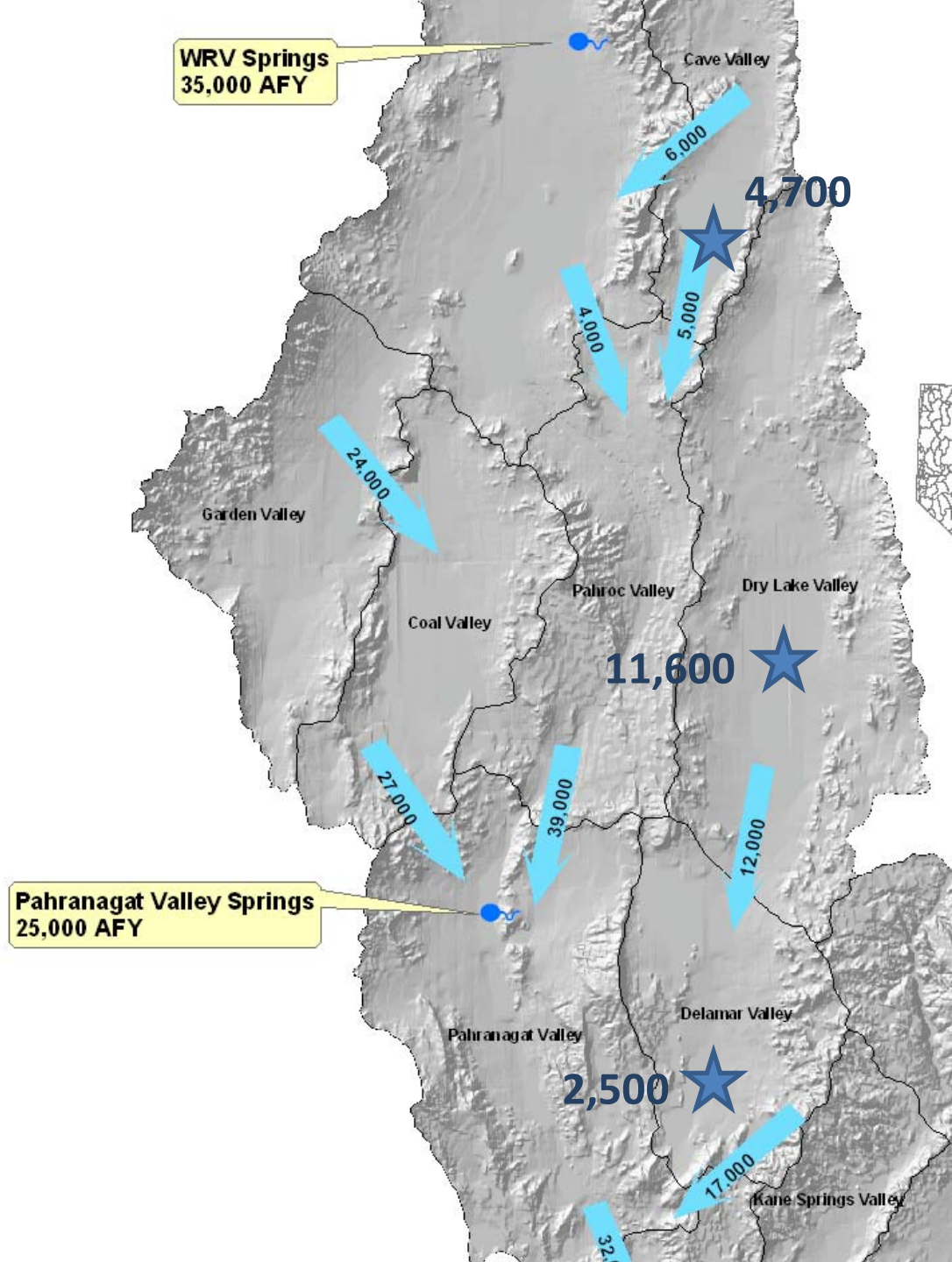
- Flow System discharges to **regional carbonate springs** in down gradient basins
- Appropriations will result in minor reduction of spring flow after 200 – 500 years. Existing rights at springs.
- If no effects are allowed, regardless of time or magnitude, then no further allocations in the carbonate-rock province would be possible.



Ash Springs, Pahranaagat Valley



# Recent SNWA Allocations for Interbasin Transfer from Cave, Dry Lake, and Delamar Valleys

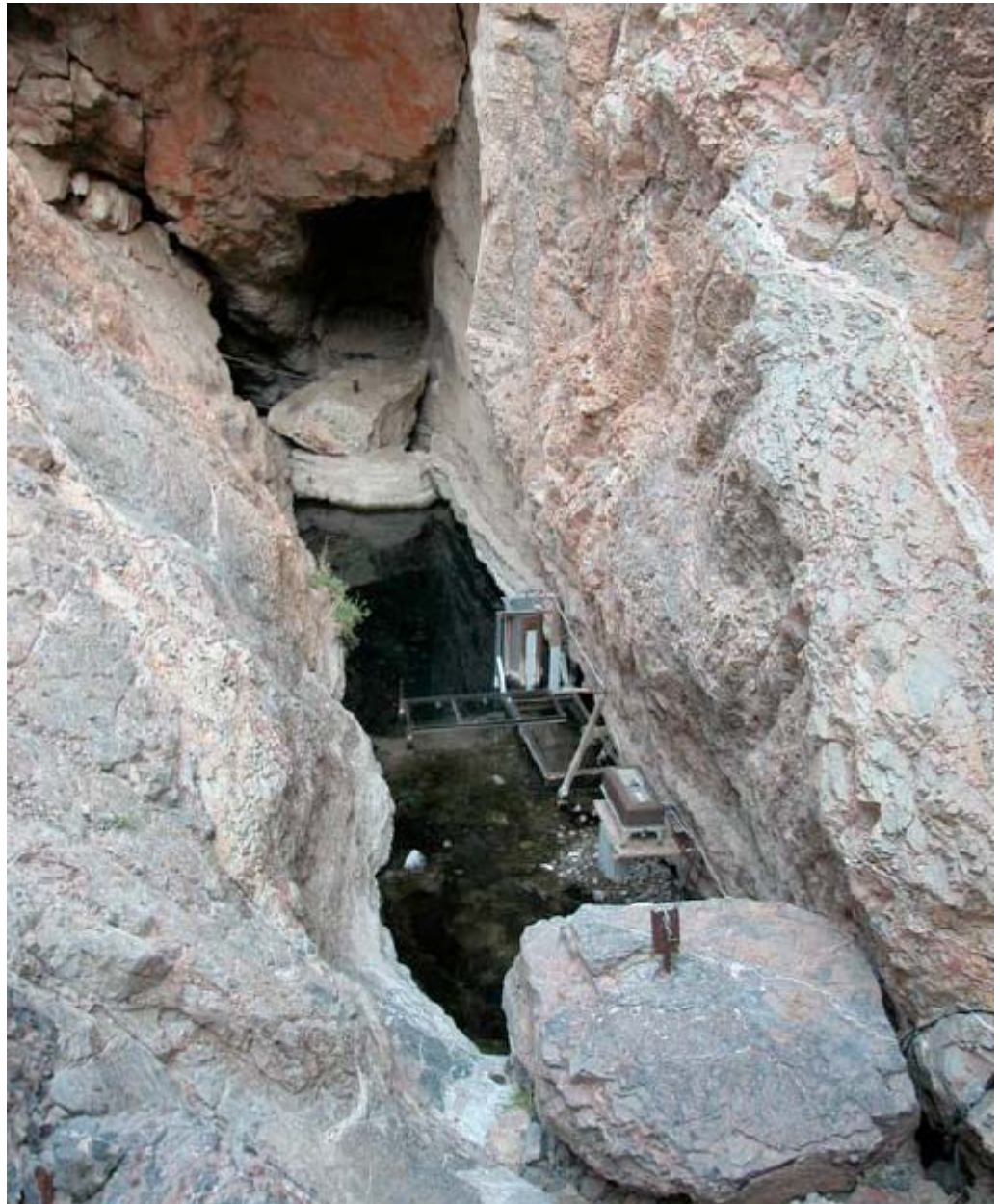


## Ruling 5875:

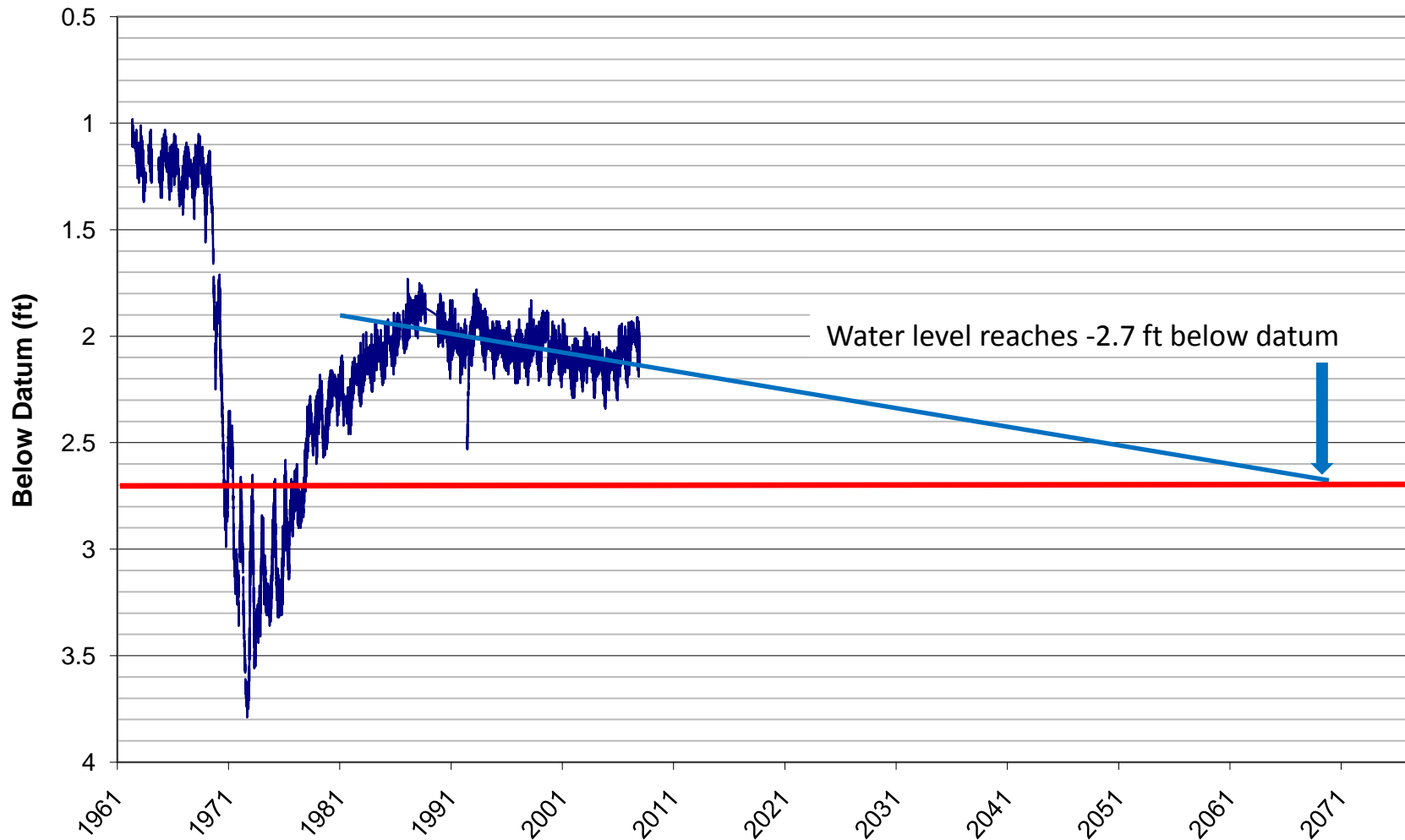
...State Engineer finds the discussion of impacts that are not manifested until several hundreds of years after the initiation of pumping is far too uncertain to be the basis of reasonable and responsible decision making.

# DEVILS HOLE

- Cappaert Case
- Pumping lowered water levels in Devils Hole
- Endangered pupfish and spawning area on shallow ledge in Devils Hole
- Court-ordered reduction in pumping
- Future Federal action likely if water levels decline below federally-mandated datum



# Devils Hole Water Levels - Potential Future Water Level Through 2070



## Amargosa Desert – Order 1197

- Closed the basin to new water appropriations
- Limits water rights transfers moving closer to Devils Hole
- Protection against increasing drawdown due to changes in POD



Location map of the Amargosa Desert area, Nye County, Nevada

0 2.5 5 10 Miles

Thank You, Questions?

<http://water.nv.gov>

# NRS CHAPTER 534

## GROUND-WATER LAW

- Vested underground rights exist by virtue of use from an artesian or definable aquifer before **March 22, 1913**, or use from percolating water, the course and boundaries of which are incapable of determination before **March 25, 1939**
- After 1939 ground water can only be appropriated by permit from the state engineer

# 1913 LEGISLATION

## NRS CHAPTER 533

### SURFACE WATER

- Main purpose was to place distribution of streams or stream systems under state control
- Another purpose was the quantification of vested rights to surface water that existed by use prior to **1905**