Citizens Water Advocacy Group

PROTECT OUR WATER

cwagaz.org

2026 CWAG Candidate Forum Prescott Valley Council/Mayor Election

Factual Basis For Questions

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It is helpful to have a few basic facts in mind to establish why we must address threats to a secure water future and the continued flow of the upper Verde River. CWAG is science based. This document uses data from the US Geological Survey and from the Arizona Department of Water Resources to analyze the following topics and present logical conclusions. A summary follows:

Current status of groundwater in the Prescott AMA:

The overdraft is large and growing.
Water levels throughout the AMA are falling, especially in the northern area.
Falling water levels causes numerous wells to fail.
Falling water levels have essentially dried Del Rio Springs.
Falling water levels contribute to reduced base flow in the upper Verde River.

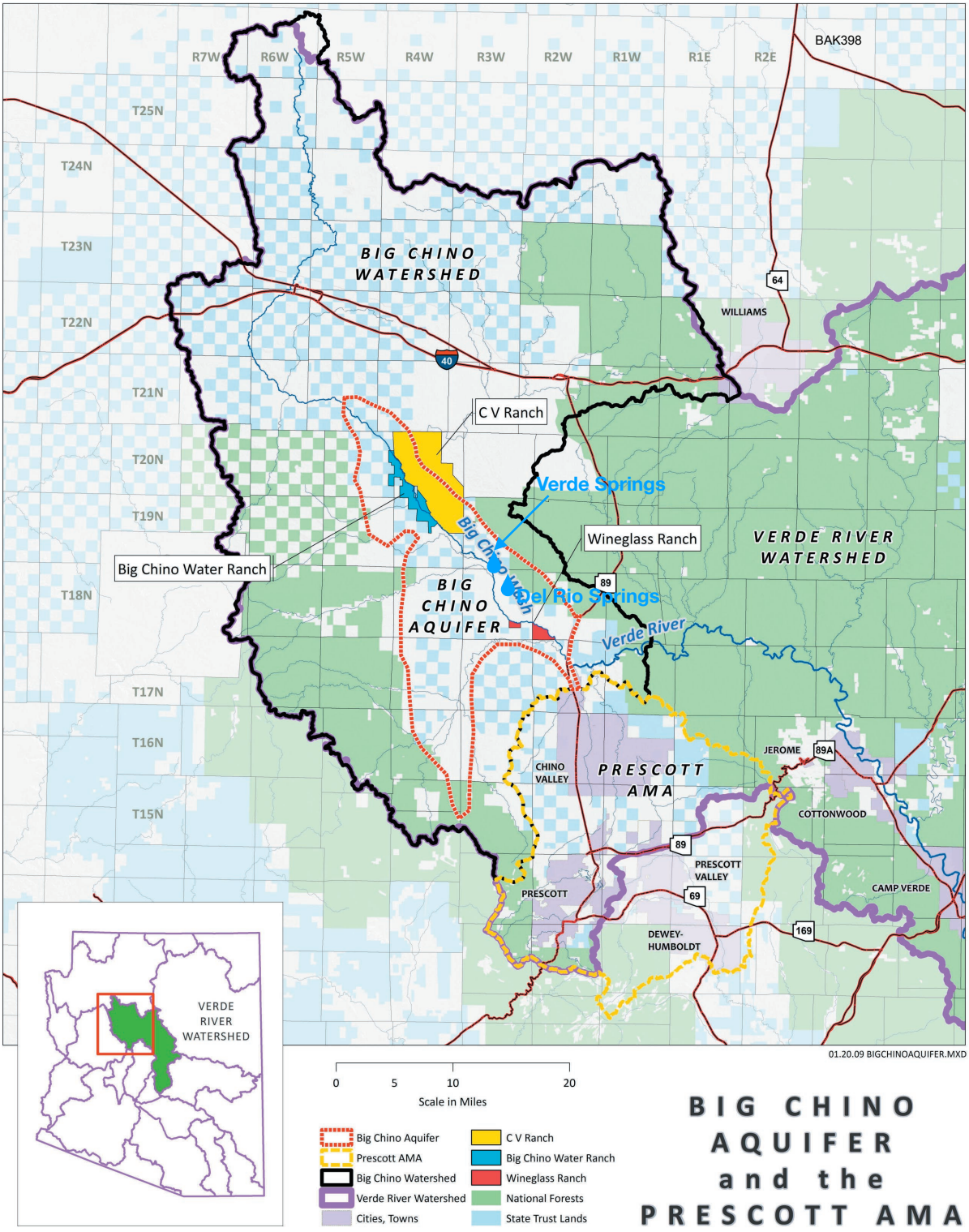
Current Status of the Verde River:

The Verde is a unique and valuable resource for the southwest.
Conservation groups are working for Wild and Scenic River designation and Outstanding Arizona Water Status.
The base flow is declining. Ecological function is now compromised. The river is in a fragile and vulnerable state.
Groundwater pumping in the Big Chino aquifer is an existential threat.

Current Prescott Valley water issues:

Big Chino Water Ranch
Regional Management and Comprehensive Plan
Conservation Plan
Wastewater and Stormwater Management
Water Policy and long-range plan
Water Quality

The map below displays the regions of concern: the Prescott AMA (PrAMA) and the Big Chino Watershed. Our water issues are larger than any single city limits.

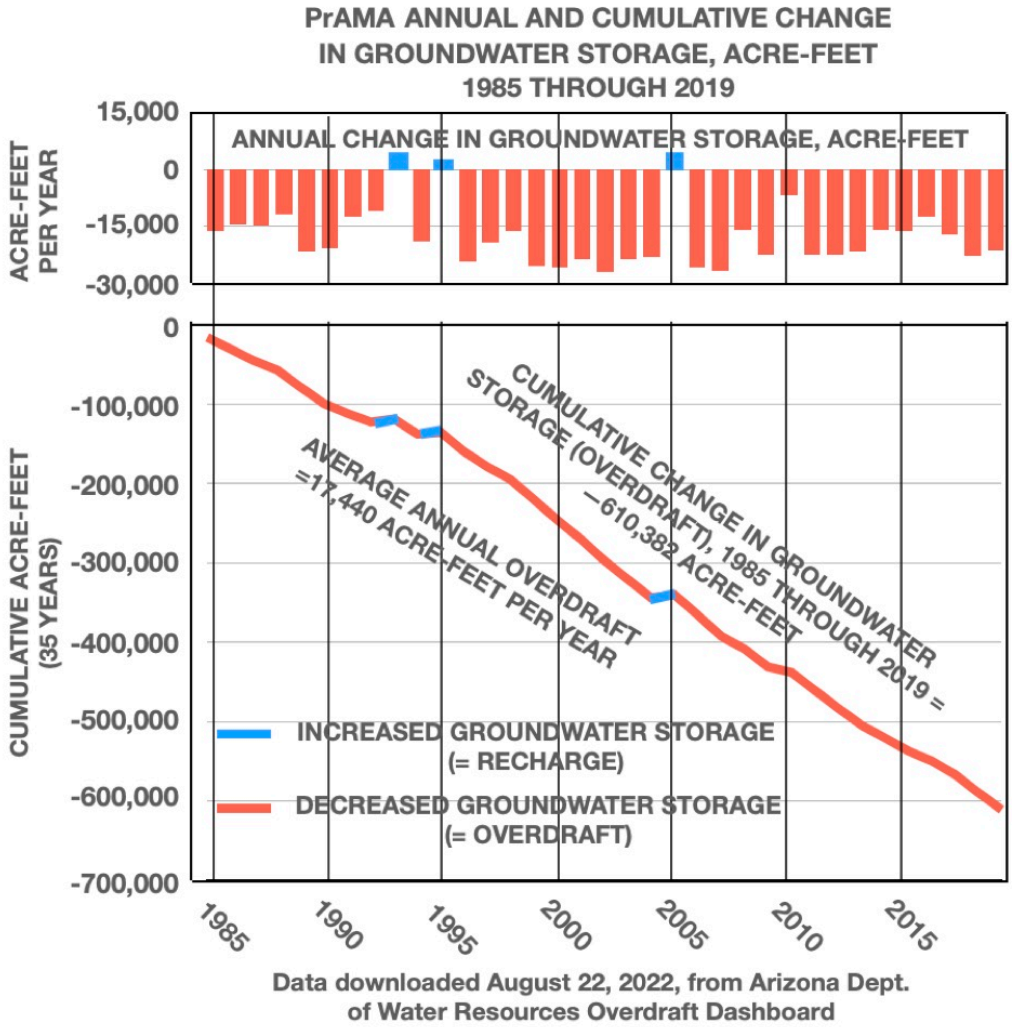


Current Status of Groundwater in the PrAMA

The potable water supply for Prescott Valley is 100% groundwater. Prescott Valley lies entirely within the Prescott Active Management Area (PrAMA). Groundwater resources in the PrAMA are managed by the Arizona Department of Water Resources (ADWR). The management goal of the PrAMA is safe yield by 2025.

Safe yield is a long-term balance between recharge and withdrawal of groundwater. ADWR declared the PrAMA to be out of safe yield in 1999 and then imposed a management plan. Twenty-six years and three management plans later, the annual overdraft remains unchanged and very large. In the recent 5th Management Plan, ADWR admits that their plans will not attain the management goal.

Unfortunately, the PrAMA is moving away from, not toward, the management goal: safe yield. Safe yield is a goal, not a requirement. ADWR places the responsibility for a safe yield plan on elected city officials in the PrAMA. At this time, no plan exists, and there are no planned discussions about a safe yield plan. There are no legal consequences for failing to achieve safe yield. There is no penalty for failure. There are no incentives. Therefore, safe yield is a policy designed to fail. It has not worked in the PrAMA, which ADWR ranks as the worst performing safe yield AMA in the state.

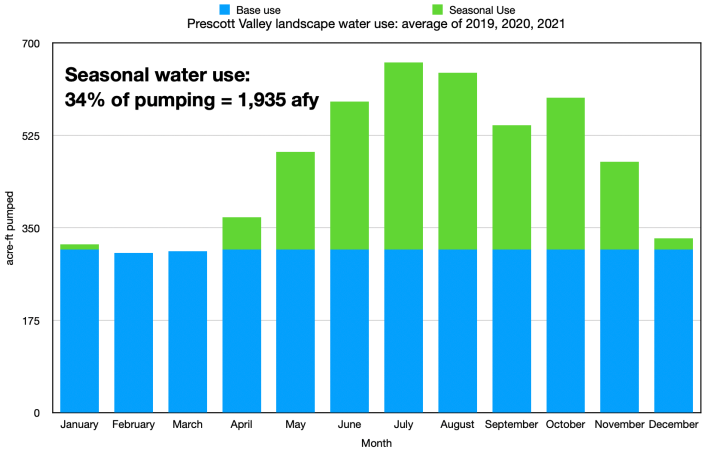


The chart above uses ADWR data and shows that the overdraft is accumulating, indicating that we are moving away from safe yield. The annual overdraft for 2019 exceeds 21,000 acre-feet per year (afy). To envision an acre-foot, imagine a football field with water one foot deep. The cumulative overdraft up to 2025 now exceeds 700,000 af. In 2019, we removed enough water from the aquifer to flood a football field 4 miles deep, That's 6.9 billion gallons in one year. The cumulative overdraft since 1985 would fill a football field 114 miles deep in water! This cannot go on forever, but there is no immediate crisis. The long-term consequences of failing to reach safe yield are loss of water security and damage to the upper Verde River. ADWR has not updated PrAMA data since 2019.

Contributors to the Increasing Overdraft

Our domestic and municipal potable water supply is groundwater. Municipal water use is currently about 75% of the total demand in the Prescott AMA in 2022. Prescott and Prescott Valley each contribute approximately equally to the overdraft. Both communities pump much more groundwater than is recharged. ADWR estimates that only 14% of AMA pumping is from "exempt" (domestic) wells serving about 19% of the population. The remaining pumping is by agricultural and industrial users.

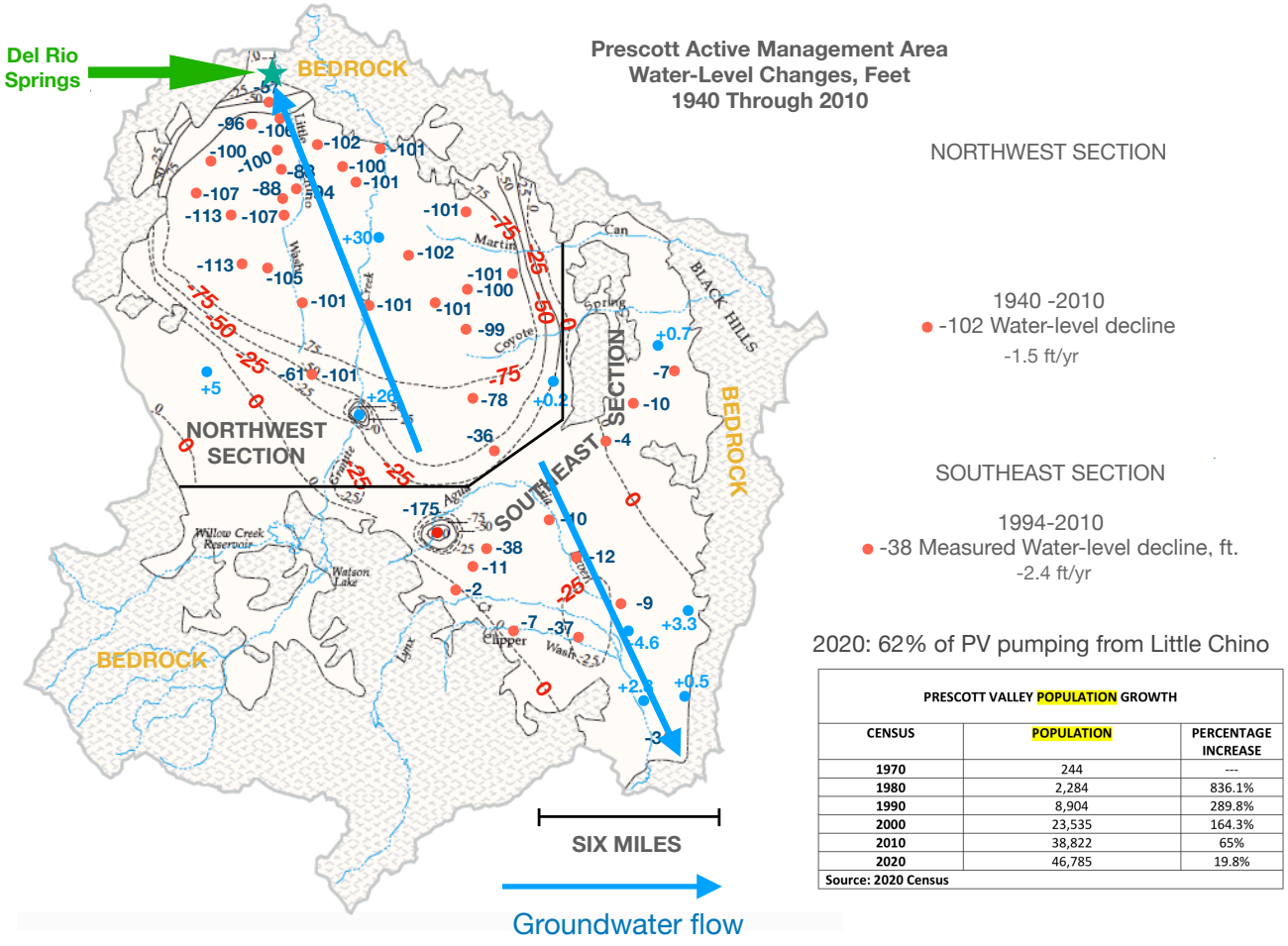
Prescott Valley's potable water supply comes from groundwater pumped from the Little Chino and Agua Fria sub-basins. Potable water is delivered for residential, commercial, and some turf uses. Reclaimed water, or effluent, has been treated at the town's advanced water treatment facility to acceptable standards for non-potable uses. Reclaimed water is used to water the Stoneridge golf course and fill the lakes at Mountain Valley Park. Excess reclaimed water is sent to the town's artificial recharge facilities for storage and use as future water supplies. The town operates two artificial recharge facilities: the North Plains facility and the Upper Agua Fria facility (riverbed south of the treatment plant). Prescott Valley is working on increasing artificial recharge by expanding current recharge sites. The town is also exploring stormwater recharge as another resource to replenish the aquifer. Prescott Valley is working on initiatives to increase water available to the town, including importing water into the PrAMA from the Big Chino sub-basin. Prescott Valley has allocated funds each year for the purpose of purchasing additional water rights within the PrAMA. The Town plans to fund $54 million in improvements in water and wastewater infrastructure over the next five years. This money will pay for well improvements, PFAS mitigation, water storage tanks, improvements at the wastewater treatment plant, and general water and sewer improvements.



In Prescott Valley, 34% of groundwater is used for landscape irrigation. This evaporates and is not recovered for recharge.

Overdraft Causes Declining Water Levels

The Little Chino sub-basin (within the PrAMA from Prescott north through Del Rio Springs) is our greatest concern because it is the primary source of water for Chino Valley, Prescott, Prescott Valley, and some Yavapai County residents. Wells in the Little Chino intercept groundwater flowing north from the Prescott basin to Del Rio Springs and the Verde River. The relentless overdraft causes groundwater levels in the Little Chino aquifer to decline.



2020: 62% of PV pumping from Little Chino

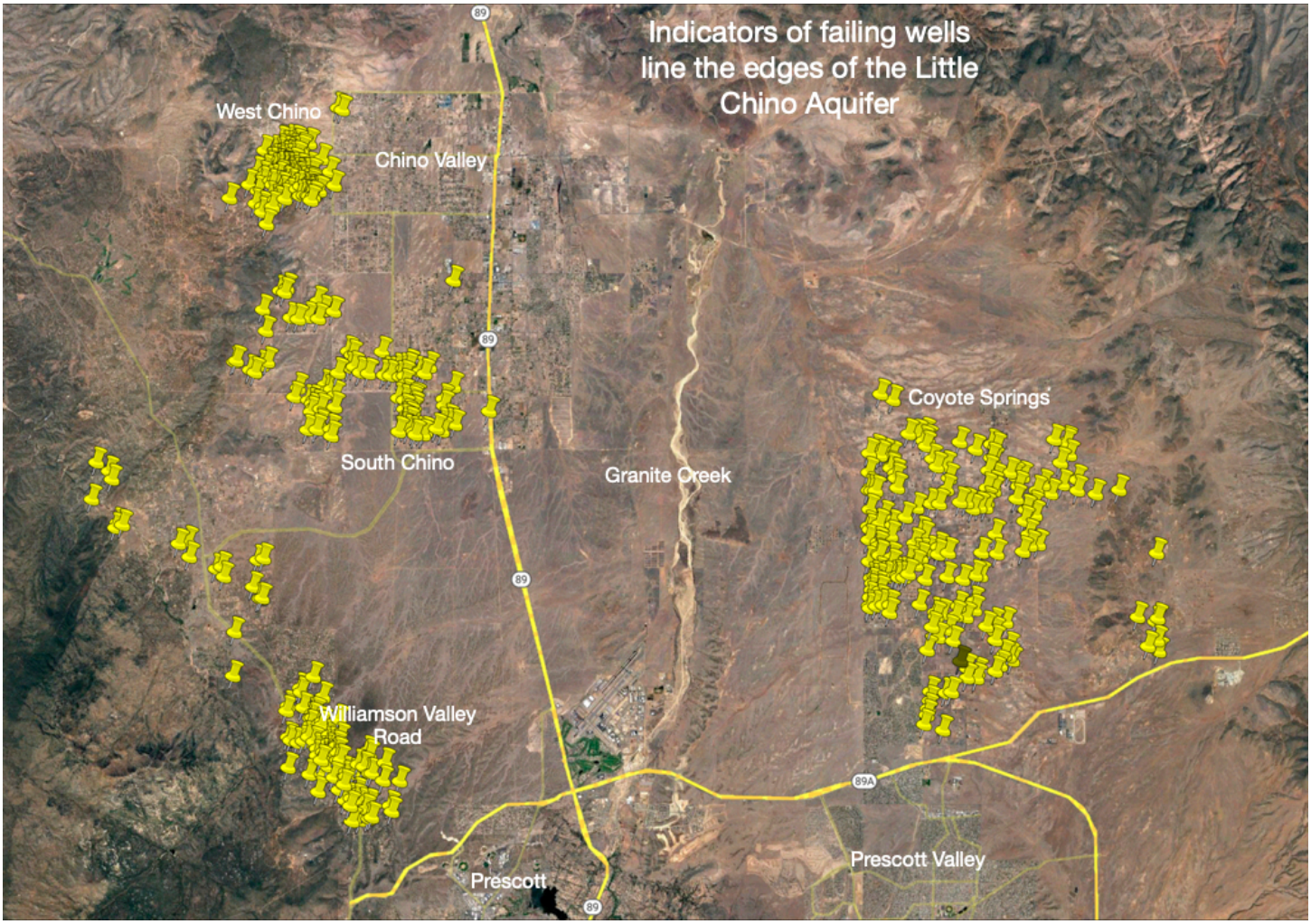
PRESCOTT VALLEY POPULATION GROWTH		
CENSUS	POPULATION	PERCENTAGE INCREASE
1970	244	---
1980	2,284	836.1%
1990	8,904	289.8%
2000	23,535	164.3%
2010	38,822	65%
2020	46,785	19.8%
Source: 2020 Census		

Over 60% of Prescott Valley's water is pumped from the Little Chino aquifer because it is much more productive than the Agua Fria, where subsurface structures containing fine silt and clay impede the flow of groundwater into the well bore. This causes the water level in the well to drop relatively quickly, so the well must be "rested" until it recovers. Meanwhile,+ water production is shifted to another well. As a result, PV is forced to alternate water production between 28 wells. Wells in the Little Chino do not have this problem.

Declining Water Levels Cause Domestic Wells To Go Dry

By inspecting aerial photos of the PrAMA, CWAG has identified hundreds of large water storage tanks on rural lots not served by a municipal utility. These tanks indicate a failing or dry well that cannot supply enough water for the home, forcing families rely on commercial water haulers to refill the tanks. These failing wells are found on the outside edges of the aquifer: west and south of Chino Valley, in the Williamson Valley Road area (recently in the news), and in Coyote Springs. CWAG expects that there are many more failing wells, and that the number will increase. This is a financially devastating event for the families. A dry well adds hundreds of dollars in monthly water hauling bills and reduces the home property value.

The water hauling services obtain water from public hydrants in Chino Valley, Prescott, and Prescott Valley.

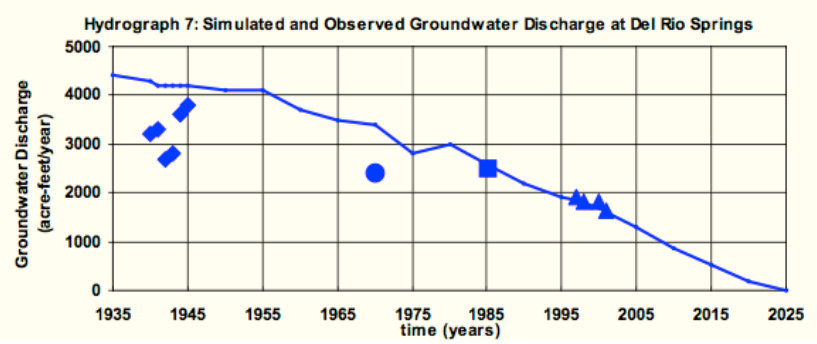


Declining Water Levels in the Little Chino Sub-Basin Causes Del Rio Springs To Dry Up

The Little Chino sub-basin contributes about 14% of the base flow of the upper Verde River. The overdraft in the Little Chino Aquifer reduces the base flow of Del Rio Springs and the river. In 2002, an ADWR groundwater model for the PrAMA projected that Del Rio Springs would cease flow in 2025. The projection is accurate: in 2026 the spring flow is only 5% of the predevelopment flow.

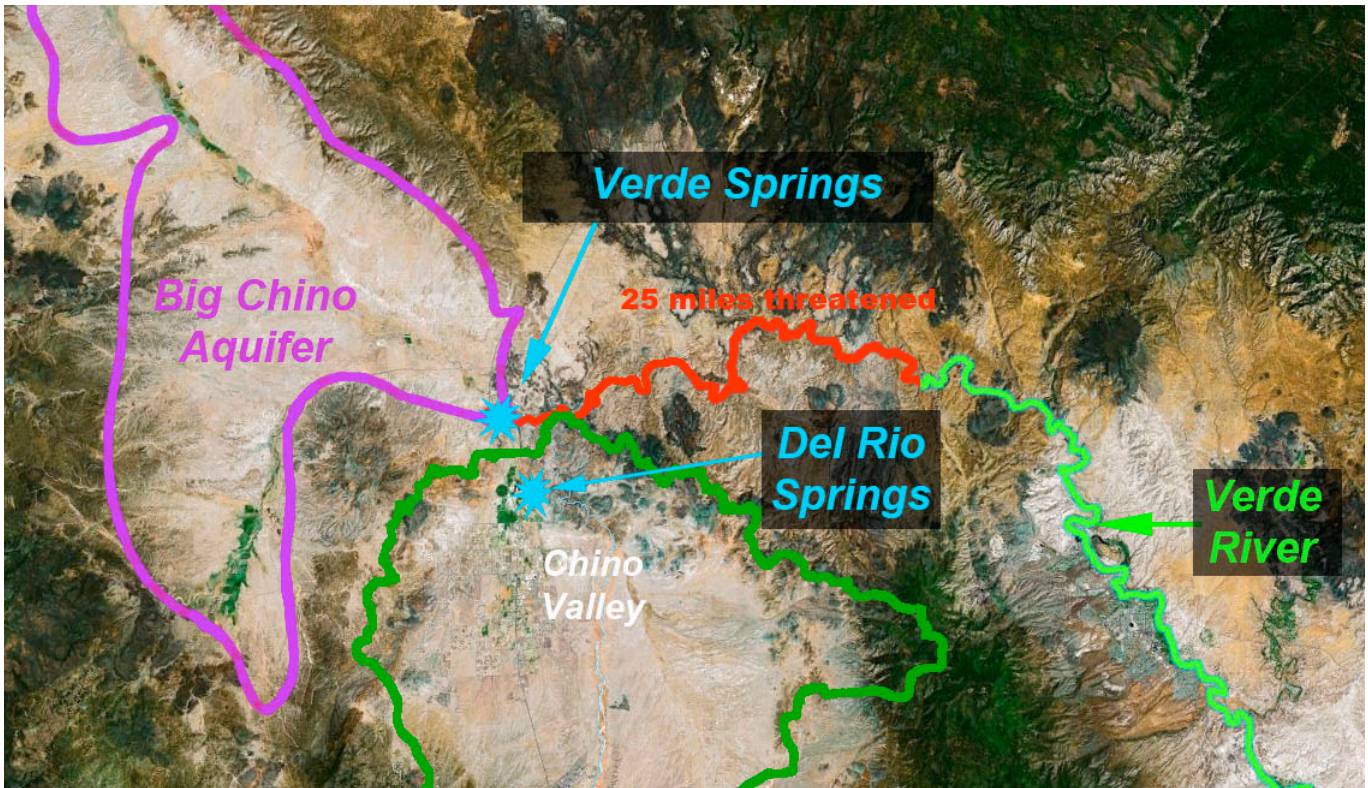
Note that Del Rio Springs was the historical headwaters of the Verde River, but now perennial flow begins 6 miles downstream at Verde Springs. We have already lost 6 miles of the river due to groundwater pumping.

The measured flow from Del Rio Springs is declining. Graph from the ADWR groundwater model for the PrAMA.



Why the Verde River Matters:

The first 25 miles of the upper Verde, from Verde Springs downstream to Perkinsville Bridge, is some of the finest surviving wildlife habitat in Arizona. Verde Springs is the only significant source of water for base flow within this part of the river. Also, see the OpEd "11 Reasons…" accompanying this document.



Prescott National Forest has declared that the upper Verde River is Eligible and Suitable for congressional designation as a Wild and Scenic River. A coalition of national and regional conservation groups is now working to request Congress to designate the Upper Verde Wild and Scenic River. The coalition has obtained letters of support from the Councils of Sedona, Camp Verde, Cottonwood, Clarkdale, Jerome, Prescott Valley, Prescott, and Chino Valley. Over 150 businesses and five Chambers of Commerce, plus the Yavapai County Board of Supervisors, Governor Hobbs, former Governor Babbitt, Prescott National Forest, the Yavapai Apache Nation, and the Yavapai Prescott Indian Tribe have also provided letters of support. Senators Kelly and Gallegos are very supportive. The coalition continues to collect supporters.

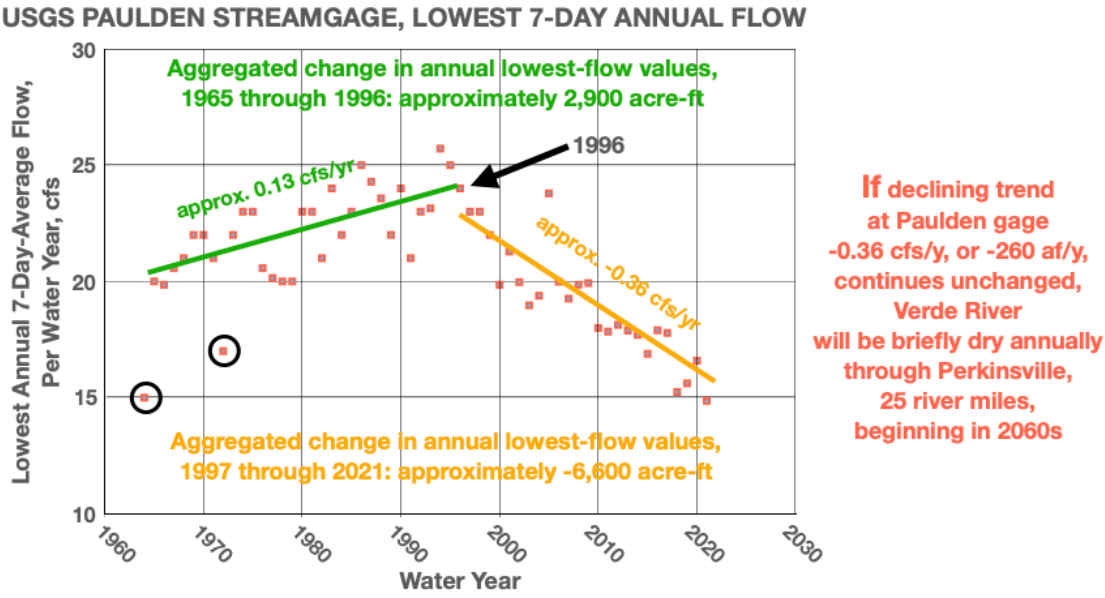
Designation of the Upper Verde Wild and Scenic River will improve the management of this important public resource by requiring that unique river values be maintained or improved. These values include recreation, scenery, cultural and historic elements, wildlife, fish, and botanic resources. The management plan will be created with local public participation.

Current Status of the Big Chino and Verde River

The Big Chino Valley, which overlies the Big Chino aquifer, consists of unincorporated lands within Yavapai County. They are not part of the PrAMA. There is no management, monitoring, or restriction on groundwater pumping. Arizona water law permits any landowner not in an AMA to pump groundwater without limit for a beneficial use, regardless of impacts on surface water or neighboring wells.

A geochemical analysis by the US Geological Survey (USGS) calculated that 80-86% of the base flow of the upper Verde River is groundwater from the Big Chino aquifer. Currently, that groundwater emerges between the beginning of Verde Springs (mile 2) and the Paulden stream gage (mile 9.8, not shown on map) to constitute most of the base flow (the groundwater component of streamflow) of the river.

The graph below uses data from the USGS Paulden stream gauge. It shows that the base flow (lowest 7-day flow per year) has been declining since the mid-1990s. In 2023, this lowest annual flow was only 13.4 cubic feet per second (cfs), which is approximately 48% of the pre-development flow in 1940. In other words, the lowest flow increased minimally and erratically until mid-90's but has declined drastically since then. Scientific models explain that higher temperatures reduce aquifer recharge, which will further degrade base flow in coming decades. The river is now in an especially vulnerable condition due to groundwater pumping, higher temperatures, and regional drought.



Verde River: Low Flow Causes Habitat Damage

The Sierra Club Grand Canyon Chapter Water Sentinels has measured the flow of the upper Verde River every month since 2007. A recent analysis of that data plus studies by the US Forest Service Rocky Mountain Research Service reveal that the upper Verde River is critically endangered and ecologically impaired due to rapidly declining flow. In summary:

- Groundwater pumping in the Little Chino Aquifer has reduced the flow of Del Rio Springs, the historical headwaters of the Verde River, to 5% of the predevelopment flow causing the upper six miles of the river to dry up. Perennial flow now begins at Verde Springs.
- Groundwater pumping and climate change have reduced the 2023 base flow at the USGS Paulden stream gage (river mile 9.8) to a record low of 13.4 cfs. The predevelopment base flow was 28 cfs. This represents a 52% reduction in base flow.
- Since the mid 1990's, the base flow at USGS Paulden has declined 0.36 cfs/yr. At that rate the river will be dry at USGS Paulden in four decades.
- Water Sentinels data from Perkinsville Bridge (river mile 26) indicates that the average flow for 2017-2024 at Perkinsville is 7.6 cfs less than at USGS Paulden. Therefore, a reduction in flow at USGS Paulden of 7.6 cfs may result in a dry river at Perkinsville Bridge. At the current rate of base flow decline, this may occur in two decades.
- The Endangered Species Act lists Perkinsville Bridge as Critical Habitat for three native fish, two snakes, and one bird. A dry river here will seriously affect these species.
- Recent studies of the aquatic habitat and species indicate a profound loss of native fish populations in the upper 19 miles.

Fundamentally, the upper Verde is now in an extremely fragile and vulnerable condition. We are now witnessing the decline of one of Arizona's last surviving perennial rivers.

Big Chino Groundwater Pumping Threats

The Big Chino Valley is not part of the Prescott Active Management Area, so groundwater is governed by the "beneficial use" doctrine. This permits a property owner to pump groundwater for a beneficial use, without limit.

Groundwater pumping in the Big Chino will reduce the base flow. The volume will be reduced by the amount pumped. Unmitigated groundwater pumping from the Big Chino aquifer is an existential threat to the upper Verde River.

Three classes of groundwater pumping threaten to deplete the Big Chino aquifer, any one of which could dry the Verde River:

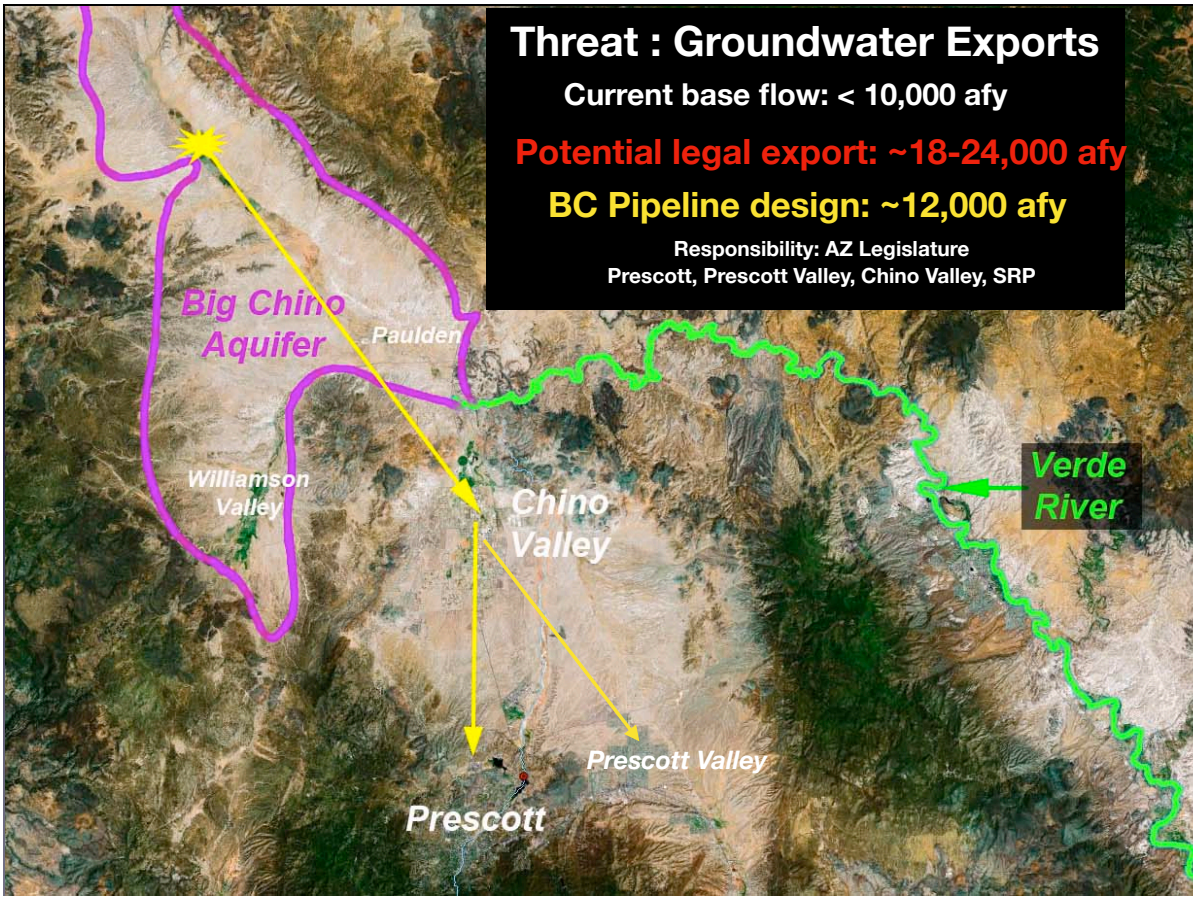
Expanded Agricultural Irrigation. It is legal under Arizona law for a farmer to irrigate with groundwater. The Arizona State Land Department has leased land and water to grow alfalfa that is shipped to foreign countries - effectively a water export. In the Sulfur Springs Valley (Willcox and Douglas, AZ), out-of-state agricultural corporations moved into the area and increased groundwater pumping by over 110,000 afy, causing groundwater levels to fall up to 8 feet per year. California agricultural corporations have moved into the Kingman area, increasing pumping over 25,000 afy. If only half of the Kingman pumping occurred in the Big Chino, it would dry the upper Verde. The ***Arizona Legislature*** must control agricultural pumping in the Big Chino Valley.

Population Growth. As Paulden grows and expands up the Big Chino Valley, groundwater pumping will increase. At the recent growth rate of 1.3%, population growth will eventually dry the upper Verde. The ***Board of Supervisors*** is responsible for controlling the density and character of land use in the Big Chino Valley.

Groundwater Export. Arizona water law (ARS 45-555) authorizes Prescott to export 8,068 afy of Big Chino groundwater to Prescott via the proposed Big Chino pipeline and to share that water with Prescott Valley. Also, cities may export water (est. 10,000 afy) from historically irrigated but now fallowed agricultural fields. The total legally authorized exportable water is approximately 18,000 afy, far more than enough to dry the Verde River. The cities of ***Prescott and Prescott Valley*** have promised to offset the effects of their pipeline pumping on the river, but no specific construction dates or mitigation plans have been announced.

Big Chino Water Ranch & Pipeline

In 1993, the Legislature sacrificed the Big Chino aquifer and the Verde River by creating an exception to water law that permits cities in the PrAMA to import groundwater from the Big Chino sub-basin — removing enough groundwater to dry up the upper Verde River twice over — without considering environmental impacts. This is the legal authority for the controversial Big Chino pipeline project.



In a December, 2004 Intergovernmental Agreement, Prescott and Prescott Valley agreed to jointly develop a project to import water from the Big Chino Valley. Costs and water are shared: Prescott 54%, Prescott Valley 46%. In 2008, Prescott asked ADWR to add the Big Chino water to their water supply portfolio. Strong public concern that the planned groundwater export would degrade the base flow of the Verde River caused numerous parties to object, resulting in litigation.

In February 2010, Salt River Project (SRP), Prescott, and Prescott Valley announced a negotiated settlement of litigation. In the "Statement of Principles," a roadmap for settlement, the parties agreed to settle the litigation, to a monitoring and modeling plan, to an expanded monitoring and groundwater modeling effort, and agreed to mitigate losses of Verde River base flow caused by the pipeline, and to support the Upper Verde Wild and Scenic River, plus other points.

The Monitoring and Modeling plan, projected to cost over $5 million over an 8-year study, was intended to investigate Big Chino hydrology and to create a new groundwater model. The project has installed new monitoring wells and weather stations, measured stream flow, and conducted geophysical surveys. This data feeds into a new groundwater model. The goal of the model is to determine if groundwater pumping will diminish the base flow of the Verde, to establish a means of advance warning for impending base flow changes, and to project the location, timing, and quantity of mitigation water needed.

The groundwater model, originally due in 2021, has been repeatedly delayed and is now promised for summer 2026. Once the model is calibrated and deemed ready for use, the cities will need to determine the scenarios that will be evaluated, which might take another year. The monitoring and modeling administrative process is not open to the public, so the public has no information about the cause of the delay or the mitigation measures being evaluated.

Professional hydrologists agree with CWAG that groundwater pumping in the Big Chino Valley will over time diminish the base flow of the Verde River. Basic hydrology concepts require that to mitigate the effects of groundwater mining, an equal volume of mitigation water must be restored to the aquifer. To date no scientific mitigation plan has been published. At this time CWAG believes that although mitigation may be initially possible in the short run, it is not feasible to adequately protect the river in the long term.

In April, 2024 the City of Prescott released an updated cost estimate for the Big Chino project, increasing it up to $360,000,000. This did not include the cost of mitigation, and Prescott Valley will need to pay for a pipeline from Chino Valley to PV. No construction date has been announced. Prescott voters must approve the financing before the pipeline can be built. Prescott Valley does not require voter approval. As of late 2025, the total investment in the Big Chino Water Ranch is over $37 million.

The imported Big Chino water will be used to support additional growth. The pipeline is sized to transmit 12,000 acre-feet per year - enough water to build approximately 60,000 new homes housing over 120,000 additional population. PV has claimed that the imported water will be used to achieve Safe Yield, but the maximum volume of imported water is only about half of the overdraft (21,000 afy).

CWAG's position on the proposed Big Chino Pipeline (attached) is that it must have zero impact on the upper Verde River. We note that there is no evidence that the pipeline is the best choice. There has been no systematic engineering analysis based on a scientific evaluation and comparison of all available alternatives to assure an economical and sustainable water supply.

At this date, no comprehensive study exists. Some prior studies have focused on a single centralized infrastructure solution (e.g., pipelines) while ignoring and failing to evaluate other potential alternative solutions. We do not expect to find a single solution, and a comprehensive study is needed to identify the optimal combination of solutions.

Regional Management

Arizona groundwater management has failed in the Prescott Active Management Area (PrAMA) . The Arizona Department of Water Resources (ADWR) named the PrAMA as the worst performing AMA in the state and states that the PrAMA is unlikely to achieve safe yield. The consequence is that groundwater overdrafts will continue to reduce groundwater levels, Del Rio Springs is nearly dry, the base flow of the Verde River is declining, and domestic wells are failing on the edges of the aquifer. ADWR tells us that they are not responsible for the solution - the solution is up to us.

Logically, because we share the same groundwater supply, we should jointly and cooperatively manage the water resource. Legally, ADWR holds the water users in the PrAMA responsible for achieving Safe Yield. So far, neither logic nor law has generated effective and sustained regional management of groundwater. There have been two previous attempts:

- An early effort by the Yavapai County Board of Supervisors established the Water Advisory Committee (WAC) in the early 2000s. The WAC commissioned the US Geological Survey to publish several valuable and fundamental studies of the Big Chino, including a groundwater model. Also, the WAC partially funded the Bureau of Reclamation to conduct a feasibility study of water resources for most of Yavapai County. The Yavapai County Board of Supervisors dissolved the WAC in 2014 due to unproductive dissension between cities.
- Another regional planning effort was the Upper Verde River Watershed Protection Coalition (UVRWPC), formed in 2007. The Coalition had tremendous potential to perform regional planning, and it is unfortunate that, due to poor leadership and financial management, it dissolved in 2024.

Although the cities in the AMA share a common water resource, they continue to compete for more water to facilitate growth. CWAG believes that the cities and the county should begin to work together on regional water planning. CWAG believes that regional planning and management of water resources is the best strategy to preserve a shared water resource and assure long-term quality of life for all current and future citizens. The planning process should include broad stakeholder/citizen participation, have adequate funding, produce a forward-looking plan with scheduled reassessments, and use adaptive management strategies.

A regional water resource management plan should be based on a scientific evaluation and comparison of all available alternatives to assure an economical and sustainable water supply. At this date, no comprehensive study exists. Some prior studies have focused on a single centralized infrastructure solution (e.g., pipelines) while ignoring and failing to evaluate other potential alternative solutions. We do not expect to find a single solution, and a comprehensive study will help identify the optimal combination of solutions.

We recommend review of CWAG's position on Regional Cooperation.

Potential Regional Solutions Need Study

- **Investigate new approaches:**
  - Join with other entities in the PrAMA to design an IGA to govern regional water management authority with the ability to finance and construct infrastructure.
  - The regional authority should conduct a comprehensive evaluation of all potential solutions, considering the economic, social, and ecological impacts, to identify the best combination of solutions.
  - Use regional infrastructure to collect stormwater for recharge or direct reuse.
  - Offset programs requiring developers to finance water conservation to compensate for their increased water use;
  - Design new subdivisions for net-zero groundwater use.
  - Advanced water purification (direct potable reuse).
  - Identify and correct unnecessary regulatory barriers to more efficient water use.
  - Land Use: Develop a conservation zoning overlay. This zoning tool can target specific sensitive areas to strengthen ordinances and building code requirements for indoor and outdoor water use.
- **Importing water:** This should be the last resort after other solutions are deployed. Possible sources include Colorado River, Big Chino, and desalination of ocean water or brackish groundwater.
- **Lobby the State:** Increased pressure on the AZ Legislature and local representatives to provide funding and technical assistance.

Is Recharge a Solution?

Prescott Valley's 2024 Annual Report to ADWR shows that 27% of total groundwater pumping was recharged. The 73% that is not recharged is due to leaks and unaccounted water (~9%), to deliveries to golf courses (~6%), to landscape irrigation (34%), for deliveries to homes on septic tanks (~13%?), and to unspecified discharge (11%). Obviously, the recharge water quantity is far less than the quantity pumped, so recharge of treated wastewater cannot be a complete solution. Additionally, recharged water accrues credits that are used to support new development instead of benefitting the aquifer.

In 2008 PV sold 2,700 afy of recharge credits to an east coast investment group for $67,000,000. ADWR stores these credits in PV's long-term recharge credit account, but the credits are actually owned by the investor. The investor sells recharge credits (~$30,000 - $40,000/af) to builders so they can prove a 100-year water supply. The credits must be used in PV and add ~$4-8,000 per housing unit. Note that lots that were grandfathered during the Great Plat Rush (explained below) do not need these credits.

How PV Developers Prove a 100-Year Water Supply

Prescott Valley developers face a much more complicated and expensive process than developers in Prescott. ADWR has qualified Prescott to be a Designated Assured Water Supply (DAWS) provider. A developer can apply directly to the City of Prescott for a 100-yr supply, giving the City additional tools to manage development.

In Prescott Valley and unincorporated Yavapai County, each subdivision developer must obtain a Certificate of Assured Water Supply (CAWS) from ADWR. The developer must apply directly to ADWR - an expensive and detailed process. The developer must prove legal, continuous, and physical availability using a groundwater model. Also the developer must demonstrate financial capability and satisfactory water quality. Substantial amounts of legal water rights are available for purchase, so legal water rights are not a barrier to growth at this time.

The Great Plat Rush

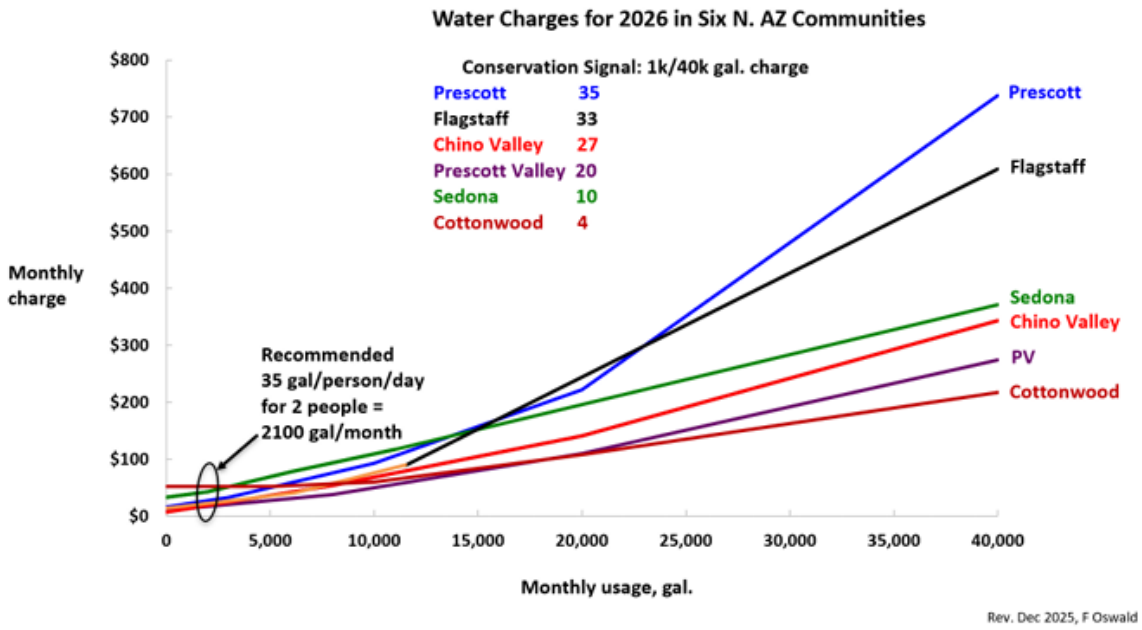
However, nearly all of Prescott Valley's development since 1999 has been exempt from the 100-year Assured Water Supply (AWS) requirements due to a loophole in the rule. This loophole is known as the Great Plat Rush.

In 1998, ADWR declared PrAMA in overdraft, which activated the AWS rules. Shamrock Water and the Fain family filed a formal objection, requiring ADWR to temporarily suspend the overdraft declaration (and the AWS rules) while the objection was investigated. In 1999 ADWR rejected Shamrock's objection and the AWS rule was activated. During the one year period between 1998 and 1999, 32,000 preliminary plats were created, primarily in PV. These 32,000 lots were grandfathered so the AWS rules do not apply. The result was to prevent management of 10,000 afy of groundwater for 100 years - about 1,000,000 af - a substantial portion of the total groundwater supply.

Great Plat Rush development since 1999 has permitted the construction of homes in Mingus West, Pronghorn Ranch, Granville, Stoneridge, Viewpoint, Quailwood Meadows, Town Center, and an expansion of Quailwood Meadows, totaling approximately 8,100 lots exempted from the AWS rules. Approximately 2,800 grandfathered vacant lots remain (2021). Other new subdivisions now require a CAWS.

Water Conservation

Water conservation alone will not solve the problem, but it is easy to implement and the least expensive strategy - a foundation for all other measures. Water rate policies are one important component of a conservation program. This graph compares water rates with other local cities.



- **PrAMA (Regional) water conservation:** Except for the City of Prescott, water conservation in the PrAMA is very weak or non-existent. A regional water conservation program should include:
  - An adaptive management plan with performance milestones and scheduled monitoring;
  - More stringent requirements for new construction;
  - Substantial incentives to upgrade existing fixtures;
  - Increased incentives for homes using septic tanks
  - Use of gray water, especially for homes using septic tanks.
  - Strong controls on landscape water use for new developments;
  - Escalating water rates applied to high water use;
  - Seasonally increased water rates to discourage landscape water use;
  - Incentive programs dedicated to reducing water use by existing domestic wells;
  - On-site collection and use of rainwater.

- **Unincorporated Yavapai County:** County authority for water conservation is limited to zoning requirements. A Water Conservation Zoning Overlay would be a valuable tool. It should include:
  - Water conservation incentives for existing homes with domestic wells.
  - Requirements for new homes use rainwater harvesting and gray water to irrigate landscapes instead of groundwater.
  - Increased requirements for new subdivisions, including Water Neutral Development designs.

- **Prescott water conservation:** Although Prescott has the best water conservation program in the PrAMA, it can be improved with better educational outreach, reduced outdoor water use, and improved management of commercial and industrial water use.

- **Prescott Valley water conservation.** Currently, PV's water conservation program is weak. However, PV is now beginning to develop an improved water conservation program. Prescott Valley has implemented programs across town operations to reduce water waste and improve efficiency, including no loss during water main flushing, smart irrigation technology, and audits at town parks. Prescott Valley encourages conservation through public outreach, the PV Water Academy, and online resources on the town website. All conservation is on a voluntary basis with no reimbursement credits. Prescott Valley is currently developing a new Conservation Plan. Options being considered include rebate programs for hot water circulation pumps and water-efficient appliances, prohibition of ornamental turf, requirements for drought tolerant landscaping, and other conservation measures.

Prescott Valley Water Management

This is a complex issue that is best addressed by viewing the video of a CWAG presentation (Prescott Valley: Groundwater, Growth, Verde River Status and Solutions) to Prescott Valley citizens on August 8, 2025. The video and presentation slides are available at https://cwagaz.org/videos/2025-08-09.

Additionally, CWAG recommends that candidates review Chapter 9 (Environmental Planning and Water Management) of the "Prescott Valley General Plan 2035." Download link: https://www.prescottvalley-az.gov/departments/development_services/general_plan_2035.php

Prescott Valley has developed a stormwater management plan that will reduce flooding by collecting stormwater and diverting it to the Agua Fria riverbed, where it will contribute to aquifer recharge.

Lakeshore 650

The November election ballot includes Proposition 492 which asks voters to approve or disapprove of the annexation of 652 acres for the proposed Lakeshore 650 development adding 3500 new homes and a park with 25 acres of turf. The water supply for Lakeshore 650 will be groundwater provided by the Town of Prescott Valley.

- If voters approve Prop 492, Lakeshore 650 will be annexed into PV. The development will use ~1000 afy and recharge ~ 270 afy for a net consumption of ~730 afy.
- If voters reject Prop 492, development could proceed subject to Yavapai County regulations, which are generally less stringent than Prescott Valley's.
  - If the land is divided as ~325 minimum 2-acre lots using well and septic, the water required is ~81 afy with no recharge for a net consumption of ~81 afy.
  - Alternatively, the developer may seek a Planned Area Development from Yavapai County. CWAG cannot estimate water use without additional information on the plans.

Prescott Valley Water Quality Issues

Clean and healthy water is a fundamental public service. In general, Prescott Valley's water utility is well managed and the quality meets standards. Municipal water quality is frequently tested to ensure compliance with federal standards. Test reports are published at https://www.prescottvalley-az.gov/utilities_news_detail_T129_R126.php. CWAG recommends that candidates familiarize themselves with these reports.

PFAS: The acronym represents a large group of chemicals known as the "forever chemicals" because they are not biodegradable. PFAS can bioaccumulate in organisms and food chains. They are now persistent in the environment and in the human body, blood, and brain. PFAS sources are fire fighting foam, water and stain resistant coatings, anti-stick coatings, food packaging, lubricants, and much more. The risk to human health are cancers, reduced immune response, liver damage, decreased fertility, and more. The US-EPA has finalized MCL standards of 4 - 10 parts per trillion (ppt) for various PFAS compounds. Public water systems must fully comply by 2029.

Prescott Valley tested effluent from several municipal wells and found levels up to approximately 20 ppt. PV recharges most of its treated wastewater into Agua Fria riverbed. Municipal wells in Quailwood, near the river and down gradient from the recharge site, were found to produce water significantly exceeding the PFAS MCL. These wells are now shut down. The disturbing conclusion is that the recharge ponds have contaminated the aquifer. Several additional wells have tested positive for PFAS contamination and have been shut down. Currently, the town is testing individual well treatments.

Water Quality Information Resources:
CWAG: https://cwagaz.org/faq/drinking-water-contaminants
ADEQ: https://www.azdeq.gov/pfas-resources