



# ARIZONA WATER COMPANY

## East Sedona Water Storage Facility

January 10, 2018 Community Meeting



# LOCATION

# Where does one find a water storage or treatment facility?



Mesa, Arizona  
Range Rider

Right next door.

# Where does one find a water storage or treatment facility?



Scottsdale, Arizona  
Bell Rd. and 108<sup>th</sup> St.

Right next door.

# Where does one find a water storage or treatment facility?



Scottsdale, Arizona  
Pima and Thomas

Right next door.

# Where does one find a water storage or treatment facility?



Southwest Center Well No. 8 and arsenic treatment plant a few feet from Adobe Grand Villas and down the street from City Hall.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



View of well and arsenic treatment system and work yard from the Adobe Grand Villas 2<sup>nd</sup> floor.

**Right next door.**

# Where does one find a water storage or treatment facility?



Single family home adjacent to Southwest Center treatment system and work yard. City Hall is across the street.

**Right next door.**



# Where does one find a water storage or treatment facility?



Harmony High Park, one million gallon storage tank and booster station.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



Sedona West Storage Facility, a 102,800  
gallon tank between two homes.

**Right next door.**

# Where does one find a water storage or treatment facility?



Sedona West Storage Facility, a  
102,800 gallon tank between two homes.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



Shadow Rock Storage Tank, 700,000 gallons  
and visible from many of homes in the area.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



Jordan Park neighborhood,  
one million gallon storage tank.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?

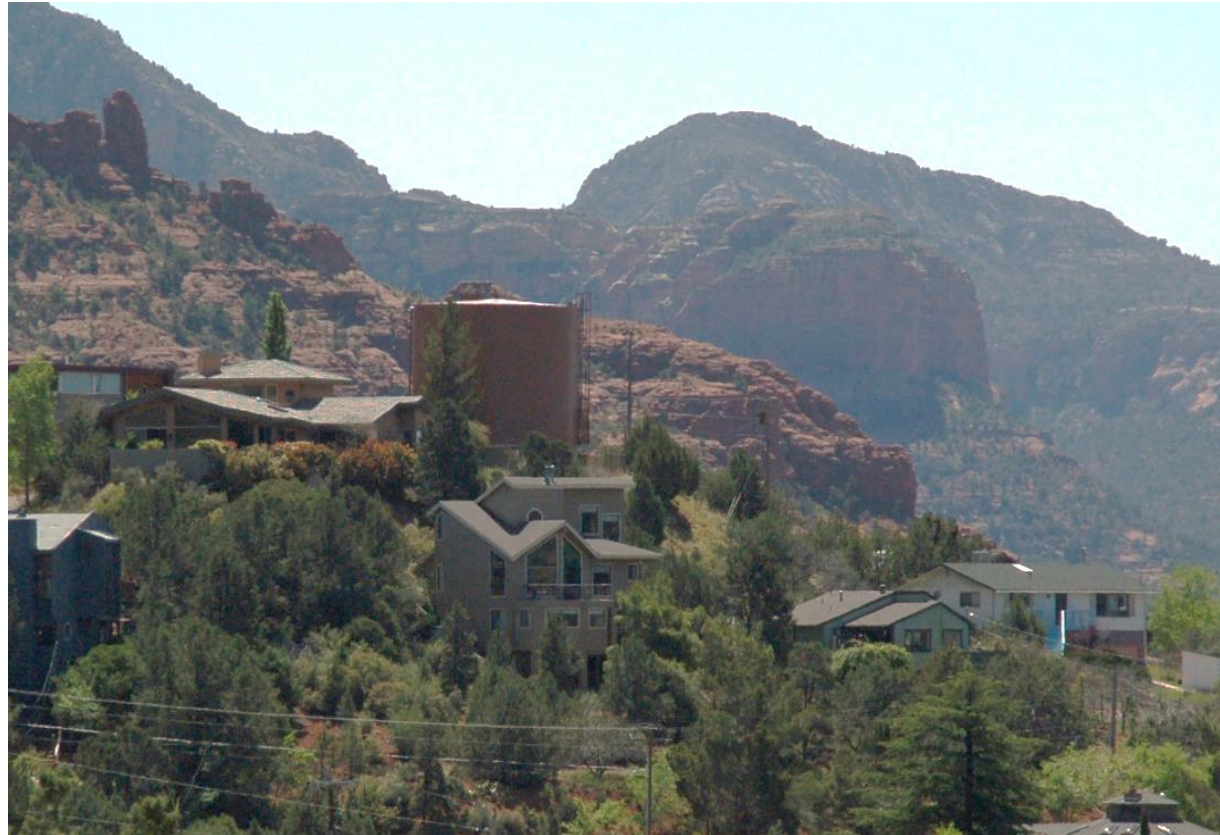


Jordan Park home adjacent to  
one million gallon storage tank.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



Town tank, 300,000 gallon storage tank,  
surrounded by homes. Homes built after tank.

**Right next door.**

**Arizona Water Company**

# Where does one find a water storage or treatment facility?



Broken Arrow Well No. 10 and arsenic removal facility. Located next to homes. Homes on two sides, located on State Route 179.

**Right next door.**

**Arizona Water Company**



# What about using Forest Service land?

On November 9 Arizona Water met with Judy Adams, USFS, to ask about using USFS land. Her response: No building on USFS land if a private site is available elsewhere.

## *From US Forest Service brochure -*

*“Alternatives – You must first consider using nonfederal land. Lower costs or fewer restrictions are not adequate reasons for use of NFS lands. Provide alternative locations for the proposal in your applications.”*

## *From US Code -*

WO AMENDMENT 2700-2017-1  
EFFECTIVE DATE: 09/18/2017  
DURATION: This amendment is effective until superseded or removed.

2700\_zero\_code  
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### **FSM 2700 - SPECIAL USES MANAGEMENT CHAPTER 2700 - ZERO CODE**

- b. The proposed use cannot reasonably be accommodated off of National Forest System lands, and the application for electric transmission and distribution facilities does not conflict with paragraph 1.
3. Do not authorize the use of National Forest System lands solely because it affords the applicant a lower cost or less restrictive location.
4. See FSM 2340.3 for specific policy related to proposals for recreation special uses.



# CONSTRUCTION

# Construction Issues: Blasting the Bedrock

Blasting significantly reduces the time needed for excavation when compared to other methods. It also reduces overall noise.



**VIDEO**

# Sound Absorbing Wall

Sound absorbing panels like these can significantly reduce noise from construction sites.



# Truck Traffic

This is typical of the sort of dump truck to be used for removal of material excavated on the site.

We estimate one or two of these trucks per hour will enter and leave the property.





# OPERATIONS

## Noise

Approximately 30db at the edge of the property.  
Equivalent to a desktop computer.

## Stormwater Runoff

No runoff in excess of what a single family home would add.

## Traffic

Less than a typical single-family home.  
Two to three visits per week by workers in pickup trucks.

## Taxes

Arizona Water Company estimates it will pay \$27,000 per year in property taxes.

## Property Values

There is no evidence that property values will be affected by the presence of this underground reservoir.





# COMMENTS AND RESPONSES

# Comment Cards

Arizona Water Company thanks everyone who attended our community meeting on March 15. Below is a list of the comments we received, paraphrased by us. Copies of the actual comment cards and the emails we received later, can be viewed at our website.

**Comment:** *David Hampton - Realistic assessment of construction impact. Not being honest with public.*

**Response:** A discussion of the construction impact will be part of the next meeting.

**Comment:** *Carole Hampton – Don't want it. Involve Forest Service. Concerned about lack of backup generator.*

**Response:** A backup generator can certainly be added to the plan. The Forest Service has clearly stated a preference that this project be built on privately owned land.

**Comment:** *Bob Campbell – A scale model would be helpful.*

**Response:** It is under consideration.

# Comment Cards

**Comment:** *Marlene and Ron Hanson – Put it in the ravine. Build below Little Horse Trail parking lot.*

**Response:** The US Forest Service has made it clear this project should be built on privately owned land.

**Comment:** *Tom and Sharon Foulds – Not in residential areas. Meet with Mystic Hills HOA. Roundabouts.*

**Response:** It is very common for water facilities like water storage tanks, wells, pumps, and treatment facilities to be located in or adjacent to residential neighborhoods.  
We met with Mystic Hills HOA Design Review Board on October 4.  
Building in roundabouts would be impossible.

**Comment:** *Barbra Barker – Submit final design to Mystic Hills Design Review Committee. Must have backup power.*

**Response:** We met with the Design Review Board on October 4. Back-up power can be added.

# Comment Cards

**Comment:** *Al Beaudin – Why in residential area? Will quickly lower home values, loss of tax revenue.*

**Response:** It is typical for water facilities such as this to be located in or adjacent to residential areas. There is no reason to expect that a project such as ours would have a negative affect on home values or tax revenue. We estimate \$27,000 annual property tax revenue.

**Comment:** *Carol and Duane Roland – Completely opposed. Doesn't belong in residential area. Too many potential problems. Look into Bruce Huelat's idea.*

**Response:** Water facilities are often located in or adjacent to residential neighborhoods. It is difficult to respond to general comments like “Too many potential problems.” Knowing which specific problems are of concern is the only way we can address them.

# Emailed Comments

**Comment:** *Larry Kane – Why not more support from Fire Department? Why not look at CC&Rs  
The footprint of the above ground facilities is too large and wouldn't be allowed in the  
area. The site is outside any reasonable use. Check alternatives.*

**Response:** The Fire Marshall does support the project. We met with the Mystic Hills Design Review Committee. On October 4.  
As mentioned before, this type of facility is completely within the reasonable uses of this property. Many water facilities in the Sedona area are in residential neighborhoods.

# Emailed Comments

**Comment:** *Ron Minzer – It will cause more flooding, traffic, noise, possible chemical spills, pump noise, electrical noise and interference with our homes electrical systems.  
Property values damaged.*

**Response:** There will be no or very little increase in runoff from our project beyond what a single family home would generate. If, however, the City is convinced that there is a danger of excess runoff, it would be a simple matter to capture that runoff on site. Once this project is complete, it will generate less traffic than a typical single family home. The pumps and operating equipment will be indoors and sound insulation will be added. Also, there is no reason to believe that it will interfere with electrical systems in the area. We see no evidence for lower property values.

# Emailed Comments

**Comments:** *Anonymous, via Ron Eland, reporter – **Claims that Keith stated that we had been working with the city to develop the plan. Drainage. The site requires removal of 25-30 feet of bedrock up to 165 feet in diameter. That is 13,000 - 15,557 cu ft. of ROCK ... Look at other sites. In full “frontal” view of Highway 179.***  
*Why is the tank so large?*

**Response:** AWC developed this proposal completely on its own without any input from the City of Sedona staff or any elected officials.  
Regarding drainage, our project will meet the City’s requirements for runoff and will not create more runoff than a single family home.  
The size of the tank was determined by analyzing requirements for fire fighting water flows plus the need to provide for peak demand in case of a system emergency.

# Emailed Comments

**Comments:** *Anonymous, via Ron Eland, reporter – Claims that Keith stated that we had been working with the city to develop the plan. Drainage. **The site requires removal of 25-30 feet of bedrock up to 165 feet in diameter. That is 13,000 - 15,557 cu ft. of ROCK ...** Look at other sites. In full “frontal” view of Highway 179. Why is the tank so large?*

**Response:** The estimate of 13,000 to 15,557 cubic feet of rock removed from the site is pretty accurate. We are going to use some of that material on site, and we are looking at options for how to handle the remainder.

The only thing visible from Highway 179 will be a building that looks very much like one of the homes in the community.



# Mystic Hills HOA Comments and Questions

Received 7-14-17

## **Q -Why a 1.5 Million Gallon Water Tank?**

What are the future plans that would call for this much water storage? Especially when the entire city has just under 900,000 gallons of storage, and is land locked (surrounded by national forest) and is 70+% built out. Further, it is being proposed on the smaller populated, east side of town which has no remaining development space and only scattered lots available for development. AWC has stated their service ends at Back O' beyond and has no interest in the VOC. Then why a 66% greater than the total of all the 3 water storage tanks that the entire city uses today? By simple deduction AWC should only need 200,000- 300,000 water storage for full service of the east side.

**A** -Arizona Water has approximately 3.4 million gallons of water storage serving our Sedona customers, including a one million gallon tank in the Jordan Park subdivision and another in the Harmony High neighborhood.

An analysis completed by the company in 2010 notes that there are 850 connections in the portion of the service area where the tank is located. These service connections have a peak demand of about 880,000 gallons per day.

In addition, we must conform to the fire code adopted by the local fire district, which calls for fire protection flows of 3,000 gallons per minute for three hours, which totals 540,000.

Virtually all of the East side of our system is supplied by a single water main. In order to maintain service and fire protection for 24 hours in the event of a main break, we need approximately 1.34 million gallons in storage, ready to be pumped into the system.

# Mystic Hills HOA Comments and Questions

## **Q - Why would the City Even Consider Granting a Waiver for Conditional Use in a Known Extensive Flooding Area of Residential Property?**

The homes on West Mallard have had continuous flooding from year to year, and this is well documented. By AWC acknowledgement, they would clear cut nearly all of the 1 acre for construction. This proposed site is in the drainage draw for the entire east side of Hwy 179; Mystic Hills and the Chapel area. Drainage is routed under 179 directly into this lot, then around two sides of the lot directly into the property of an existing home. The tunnel under the road has seen over 8 feet of flooding, as evidenced by the water lines in the tunnel and debris the city has had to clean out of the tunnel after heavy rains. Two (2) of the homes have had water in their homes, while two others have had significant damage to their property. Sedona continues to have significant flood prone and flood damage areas. To approve one more project that directly impacts existing homes and property is inexcusable. Who is placing a bond for several million dollars for water and or construction/ blasting damage? Damages, from shifting could take years to manifest.

**A** -The proposed project will have minimal impact on the three homes that are now in the path of the stormwater. What little runoff there is can be captured on site by using retention basins and other techniques. The equipment room will be located above the flood zone.

With regard to potential damage to homes from construction activity, Arizona Water Company's contractors are required to be fully insured. When the facility goes into operation, AWC is also fully insured for the operation of its system.

# Mystic Hills HOA Comments and Questions

## **Q -Why allow a Prime Residential Lot Surrounded by High End Property and High Tax Revenue to be Taken Out of Real Estate Tax Inventory?**

The proposed water tank is enormous tank (by any standards) on existing Residential zoned property. This will diminish property as well as tax values of the adjacent lots as well as homes in the area. Would you put your \$1,500,000 home adjacent to a 1,500,000 gallon tank and pump house? Especially, when an alternate site could be with a few hundred yards.... Honestly? We bet not. Further, what is the tax rate for a water tank vs a home on the same lot? Will AWC pay the same real estate tax rate as if a \$1,500,000 home was on this property?

**A** -The project is allowed under current zoning regulations and there are examples of million dollar homes adjacent to water tanks in Sedona today. We have designed this proposed project to conceal the tank. The operating equipment will be located inside a structure resembling the surrounding residences. We see no reason to believe it will diminish property values because the water storage tank will resemble a high-end home, not a water storage tank.

Regarding tax revenue, we estimate that property taxes on the site after our project is completed would be approximately \$27,000 per year.

# Mystic Hills HOA Comments and Questions

## **Q - Why Was This Entire Project Done in Secrecy?**

Five years ago AWC purchased the proposed lot. The answer given by the AWC presenter, at the public meeting was: “We have been working with the city to develop this site”. City Staff has sought review from numerous departments since the January 2017 project submittal application for waiver for conditional use. The City in April, 2017, posted on its website, that the Project was in 'final approval stage'. Yet no one in the area was even contacted until April. No one in the community was informed nor working with AWC to develop community involvement, EVER! Yet the city Staff had the project up for final approval! This City belongs to its Citizens and they should be involved long before any submittal is ever presented, for any consideration or department reviews. The City is run by its elected leaders as guided by the laws and regulation duly authorized. Yet, there is the appearance that AWC is doing all possible to circumvent reasonable procedures and keep the public in the “dark”.

**A** -Our community meeting was the first step in the approval process, not the final step. The city has a well-established and detailed process for approving projects, and community input comes at the beginning and throughout the process.

# Mystic Hills HOA Comments and Questions

## **Q - Why Were There No Alternatives Sites Submitted for Review or Evaluated?**

"This is the only site being considered" statement that was made by AWC. Yet several alternate sites were suggested. As residents of Sedona, we have been, blatantly misled by AWC. When asked by Homeowners why not use one of various sites on forest service property, we were told "they won't let us". Yet, when pushed on previous failures to gain approval on other sites, AWC acknowledge community resistance, not the Forest Service was the cause of failures. Each time AWC once again offered only one choice. Further, each of these tanks were above ground tanks. We submit they failed on not one, not two, but three different times, because they refuse to get the community involved before project was developed into a proposal. When we asked AWC, why they selected a residential lot, their answer was " that's what our real estate department gave us". There are several alternative sites that are close by and would not impede on existing home or residential lots. Of course, AWC does not own any of this alternative property, but with a little effort on AWC's part, more than one would be an ideal site that should work for AWC considering previous sites they wanted for water tanks.

**A** - Arizona Water Company has been looking at alternative sites for several years. This one meets our criteria very well.

# Mystic Hills HOA Comments and Questions

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**A** - Arizona Water Company has been looking at alternative sites for several years. This one meets our criteria very well.

# Mystic Hills HOA Comments and Questions

## Additional Questions

This Proposal Is a Tremendous Undertaking in Size, Scope, Complexity and Time. Numerous questions, were offered and minimal or no detail, responses were offered by AWC. Significantly better and more detailed answers are needed.

**Q** -Why a 1.5 million-gallon tank?

**A** -The storage capacity is needed for proper fire flow, storage and to meet peak water demand in case of emergencies. The size was calculated using industry standards and Arizona Water's experience in Sedona.

**Q** -Why attempt to extract hundreds of thousands of tons of bedrock?

**A** – Arizona Water plans to build the water storage tank underground to minimize impact on the neighborhood. In order to build the tank underground, we must remove the bedrock.

**Q** -How long will excavation take?

**A** -We estimate it will take 3 to 4 months.

# Mystic Hills HOA Comments and Questions

**Q** -Could excavation take longer?

**A** -Unlikely, since our team has completed two geotechnical surveys of the site and consulted with contractors that specialize in excavation. They have completed more than 10 projects in the area and are very familiar with the site conditions.

**Q** -Your engineering report is vague on blasting to remove this rock, will you have to blast?

**A**—Blasting will not be required to excavate the site. However, the excavation contractors tell us that blasting can reduce the excavation time by several weeks and lower the noise level from excavation.

**Q** -Why not put it under parking lots, tennis courts, or Forest Service land instead of on a residential lot?

**A**—It is not unusual to locate these facilities such as the proposed reservoir in a residential area. AWC must control the property on which the tank sits because we must have 24/7/365 access to the tank. If we built under parking lots or tennis courts we would not have full access to the tank to ensure safe, reliable water service and fire flows. Additionally, problems with our tank or equipment would have an adverse effect on those facilities in case of an emergency. Even routine maintenance could be disruptive.

We have evaluated the Forest Service land option, as well. The Forest Service has discouraged Arizona Water from building on public lands if there were any alternatives available.



# Mystic Hills HOA Comments and Questions

**Q** -What is the noise level of the completed tank and all its support?

**A** -The estimated noise level will be less than 37 dB at the property boundary when equipment is running. This is the equivalent of a personal computer. The following link compares decibel levels to common, household items and experiences. <http://www.noisehelp.com/noise-level-chart.html>

**Q** - How much power will you need?

**A** - The facility will use an 800 amp, three phase service, located within the building, to run four 100-horse power pumps in addition to other smaller equipment.

**Q** -What are the utility requirements, including back-up generators?

**A** -A stationary or portable generator can support the facility. The Company is willing to discuss this issue.

# Mystic Hills HOA Comments and Questions

**Q** -What kind lighting on the facilities and will the lights be on 24/7?

**A** -External lights will be provided to meet the City ordinance and the surrounding area. The facility does not need lights to be on 24/7.

**Q** -100's of trucks will be required for extraction, and then construction and countless cement trucks? What exact route/roads will be used?

**A** - From Highway 179, cars and trucks will reach our property by taking the following route: Cathedral Rock Trail to Castle Rock Trail to Chimney Rock Trail to Bell Rock Trail to our property.

**Q** -Have all affected homeowners along the routed been notified?

**A** -There are a handful of homeowners on or near the access route whose property is outside the 500-foot notification requirement who have not been notified as of the beginning of July. We will add them to our notification list and make sure they are brought up to speed.

# Mystic Hills HOA Comments and Questions

**Q** -Can the Residential route and HWY 179, 89A take the all the heavy loads? Where is all the extracted material being sent?

**A** - The haul trucks used for construction will be regular trucks that meet ADOT and City of Sedona standards, so local streets and highways are fully capable of handling the loads.

We plan on reusing as much of the excavated material on the site as possible for landscaping and construction purposes. The contractor usually determines where the material will be disposed of in accordance with all local regulations; however, we are open to ideas from the community.

**Q** -The tank will have some above ground footage, is there a, “not exceed” height?

**A** - The support buildings are one story and the tank itself will not extend more than four feet above the surface at the downhill side of the property. Landscaping will conceal the area of the tank that extends above the surface.