

ARIZONA WATER COMPANY

East Sedona Water Storage Facility

Citizen Participation Report to the City of Sedona

April 2018



East Sedona Water Storage Facility Public Participation Report

As a long-time member of the Sedona community, Arizona Water Company ("Arizona Water") has a deep understanding of the need for public participation in large projects such as the East Sedona Water Storage Facility ("Project") we are proposing.

Below are the requirements for the report set by the City of Sedona ("City") (in **bold**), followed by the steps we have taken to comply.

A. Purpose.

- 1. To ensure that applicants pursue early and effective citizen participation in conjunction with their applications, giving them the opportunity to understand and try to mitigate any real or perceived impacts their application may have on the community.
- 2. To ensure that the citizens and property owners within the community have an adequate opportunity to learn about applications that may affect them and to work with applicants to resolve concerns at an early stage of the process.
- 3. Facilitate ongoing communication between the applicant, interested citizens and property owners, staff, Planning and Zoning Commissioners and elected officials throughout the application review process.

Arizona Water filed its Conditional Use Permit application for the Project with the City on January 17, 2017. Following the submission to the City, we began our communications and community outreach with the local residents. We used two separate lists to reach out to residents and homeowners within the 500-foot radius of our project. The first was created by Arizona Water using Coconino County's GIS system and the second was purchased directly from the City. The two lists were substantially the same and we made sure that no one was left off of the final list.

In addition, Arizona Water set up a project-related web page that contains key documents about the project. The web page can be found at: http://www.azwater.com/east-sedona-water-storage/.

Our initial communication about the project was on February 8, 2017 via a two-page letter that was both hand delivered to each residence and mailed via USPS to each mailing address.

Since February 8, 2017 Arizona Water has held three open community meetings to discuss details of the project. We also met with the Mystic Hills Homeowner's Association's Design Review Board. All community meetings were held at the United Methodist Church, 110 Indian Cliffs Road, Sedona, AZ. The HOA Design Review Board meeting was held at the HOA's Clubhouse on East Mallard Drive.

Meeting 1: March 15, 2017. Discussed general reasons for and design of the project.

Meeting 2: October 4, 2017. Met with HOA Design Review Board.

Meeting 3: January 10, 2018. Discussed location issues and construction details.

Meeting 4: February 21, 2017. Met with local residents to discuss runoff and drainage issues.

B. Citizen Participation Plan. The Citizen Participation Plan is not intended to produce complete consensus on all applications, but to encourage applicants to be good neighbors and to allow for informed decision making.

The following is taken from the application submitted to the City January 17, 2017:

East Sedona Water Storage Tank, Booster Pump Station and Related Appurtenances

CITIZEN PARTICIPATION PLAN

Arizona Water has a keen appreciation for the importance of public involvement in important public decisions. In fact, the project we hereby submit to the residents and City of Sedona has been very strongly influenced by previous efforts to build a storage reservoir to serve this part of our system.

Our goal has been to discuss this project early, even before it was submitted, and often, so that all key stakeholders can weigh in. Arizona Water Company will undertake all the steps related to the citizen participation process as described in the city's Project Application Instructions:

- 1. We will contact neighboring property owners (typically within 500 feet of the project site) and any affected Homeowner's Associations. Based on the size and scope of the project, a larger notification radius by be required.
- 2. Arizona Water Company will hand deliver a letter to introduce ourselves, describe the project, and provide property owners with a way to contact us directly.
- 3. A community meeting/open house will be scheduled after we have been able to discuss the best time and location with members of the community and city staff. We will find a location for the meeting, set a date that works for the largest possible group of stakeholders. At the community meeting, we will provide visual materials, answer questions, document the discussion, and obtain the names of those in attendance.
- 4. During the City's deliberation process, Arizona Water Company will keep track of all contacts with neighboring property owners and other stakeholders, including name, date, and item of concern.
- 5. Before the first public hearing, we will present a report to City Staff documenting comments received though the public involvement process, with emphasis on comments related to significant changes in the application.

6. We understand that Citizen Participation Report is required to be submitted prior to scheduling a public hearing.

In addition to the required activities, Arizona Water Company will be very responsive to the needs of residents, stakeholders and city decision-makers if additional information, materials or community meetings are deemed necessary.

- C. Target Area. The level of citizen interest and area of involvement will vary depending on the nature of the application and the location of the site. The target area for early notification will be determined by the applicant after consultation with the Director. At a minimum, the target area shall include the following:
- 1. Property owners within the public hearing notice area required by other sections of this Code.
- 2. The head of any homeowners association, or community/neighborhood appointed representative adjoining the project site.
- 3. Other interested parties who have requested that they be placed on the interested parties' notification list.
- 4. Those residents, property owners, or interested parties that may be affected by the application.
- 5. The Director may determine that additional notices or areas be included.

Arizona Water used two lists of homeowners using a 500-foot radius, one from the City and one we created from the Coconino County GIS database.

In addition, Arizona Water added the names of residents outside the 500-foot radius who signed in at the first and subsequent community meeting, and several others not on our list but who lived along the ingress/egress route.

Arizona Water identified the Mystic Hills Home Owners Association as the only active HOA in the area. We invited members of the HOA to attend our first community meeting, and requested a meeting with HOA's Design Review Board in April of 2017.

Representatives of the Mystic Hills HOA were not able to meet with Arizona Water representatives until October, 2017 but in the meantime, Arizona Water received a series of questions from them, all of which were answered in writing and can be found on our project website.

D. Citizen Participation Plan. At a minimum, the Citizen Participation Plan shall include:

- 1. How those interested in and potentially affected by an application will be notified that an application has been submitted.
- 2. How those interested and potentially affected parties will be informed of the substance of the change, amendment, or development proposed by the application.
- 3. How those affected or otherwise interested will be provided an opportunity to discuss the applicant's proposal with the applicant and express any concerns, issues or problems they may have with the proposal in advance of the public hearing.
- 4. The applicant's schedule for completion of the Citizen Participation Plan.
- 5. How the applicant will keep the Department of Community Development informed on the status of their citizen participation efforts.

The following is taken from the application submitted to the City January 17, 2017:

East Sedona Water Storage Tank, Booster Pump Station and Related Appurtenances

CITIZEN PARTICIPATION PLAN

Arizona Water has a keen appreciation for the importance of public involvement in important public decisions. In fact, the project we hereby submit to the residents and City of Sedona has been very strongly influenced by previous efforts to build a storage reservoir to serve this part of our system.

Our goal has been to discuss this project early, even before it was submitted, and often, so that all key stakeholders can weigh in. Arizona Water Company will undertake all the steps related to the citizen participation process as described in the city's Project Application Instructions:

1. We will contact neighboring property owners (typically within 500 feet of the project site) and any affected Homeowner's Associations. Based on the size and scope of the project, a larger notification radius by be required.

- 2. Arizona Water Company will hand deliver a letter to introduce ourselves, describe the project, and provide property owners with a way to contact us directly.
- 3. A community meeting/open house will be scheduled after we have been able to discuss the best time and location with members of the community and city staff. We will find a location for the meeting, set a date that works for the largest possible group of stakeholders. At the community meeting, we will provide visual materials, answer questions, document the discussion, and obtain the names of those in attendance.
- 4. During the City's deliberation process, Arizona Water Company will keep track of all contacts with neighboring property owners and other stakeholders, including name, date, and item of concern.
- 5. Before the first public hearing, we will present a report to City Staff documenting comments received though the public involvement process, with emphasis on comments related to significant changes in the application.
- 6. We understand that Citizen Participation Report is required to be submitted prior to scheduling a public hearing.

In addition to the required activities, Arizona Water Company will be very responsive to the needs of residents, stakeholders and city decision-makers if additional information, materials or community meetings are deemed necessary.

We made certain that the staff from the Community Development Department were informed of each community meeting. Staff did attend our first meeting and one City Council member attended our final meeting.

E. Public Notice. These requirements are in addition to public notice provisions required by the Land Development Code.

F. Additional Meetings. The Director may require the applicant to hold additional citizen participation meetings based on:

1. The length of time between the last citizen participation meeting and the date of the submittal of the application.

- 2. The extent of changes that have occurred to the development proposal since the last citizen participation meeting was held.
- 3. The length of time between last public hearing (such as a conceptual review hearing) and the date of submittal for further development application.

Arizona Water's most recent community meeting was held February 21, 2018 at the request of the residents who specifically asked for more details about drainage and stormwater issues.

We are prepared to hold additional meetings if the City staff so directs.

- G. Citizen Participation Report. The applicant shall provide a written report to the Director and the Planning and Zoning Commission on the results of their citizen participation effort (prior to the notice of public hearing). The Citizen Participation Report shall include the following information:
- 1. Details of techniques the applicant used to involve the public, including:
 - a. Dates and locations of all meetings where citizens were invited to discuss the applicant's proposal.

On February 8, 2017, Arizona Water hand-delivered and mailed notices to everyone within the 500-foot radius.

On Wednesday, March 15, 2017, Arizona Water hosted its first community meeting at the United Methodist Church located at Sedona United Methodist Church, 110 Indian Cliffs Road, Sedona, AZ.

On October 4, 2017, Arizona Water met with members of the Mystic Hills HOA Design Review Board at the Mystic Hills Club House, 104 East Mallard Drive, Sedona, AZ.

A second community meeting was held on January 10, 2018, at Sedona United Methodist Church, 110 Indian Cliffs Road, Sedona, AZ.

A third community meeting was held on February 21, 2018 at the same location. This meeting was at the request of residents who wanted to focus on stormwater runoff and drainage from the project.

b. Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters and other publications.

Notices

c. Where residents, property owners, and interested parties receiving notices, newsletters, or other written materials are located.

Within 500 foot radius

d. The number of people that participated in the process.

Approximately 50 to 60 people participated in the 3 community meetings held between March 15, 2017 and February 21, 2018.

On October 4, 2017, Arizona Water met with four members of the Mystic Hills HOA Design Review Board.

The content of each meeting notice and presentation materials used at the meetings can be found in the Appendix to this report.

- 2. A summary of concerns, issues, and problems expressed during the process including:
 - a. The substance of the concerns, issues, and problems.

Substantial concerns included:

- Construction impacts noise and traffic
- Operations noise and lighting
- Backup power
- Stormwater runoff from the project site
- Alternative locations
- Loss of tax revenue
- Loss of residential property value
 - b. How the applicant has addressed or intends to address concerns, issues and problems expressed during the process.

Construction impacts remain a significant issue for a number of residents. Noise and truck traffic will be considerable, as they would if two single-family residents were being built. Arizona Water is looking for ways to mitigate both noise and traffic.

Regarding the noise problem, we have proposed to use blasting technology rather than heavy duty jack hammers and other heavy equipment to excavate the site. Blasting will cut weeks from of the excavation process. Arizona Water is also considering the use of sound absorbing barriers to reduce the construction noise.

Arizona Water is looking at a variety of ways to reduce the truck traffic using local streets. Arizona Water has had preliminary discussions with ADOT about accessing the site from Highway 179 or West Mallard but, no formal plan with ADOT has been developed. Arizona Water will also consider how to stage and time the excavation so we keep trucks off the highway and out of community during peak traffic times.

Operations noise and traffic are pretty much non-issues. The on-site equipment will be virtually inaudible from even the nearest home. Traffic into and out of the site for routine checks will occur during normal business hours (8:00 am to 5:00 pm) and average two to three trips per week; less than most of the nearby homes.

Backup power – An on-site generator is possible but, no decision has been made. Arizona Water has access to portable generators which can be delivered to the site and provide the needed back up power during an emergency. On-site generators require fuel storage, routine maintenance and regular operation for testing of the equipment; which is unnecessary with portable generators.

Stormwater runoff from the project site – During our last community meeting Arizona Water demonstrated that by including two retention basins the run-off from the site is reduced below the run-off from the site in its current natural state.

Alternative locations – Many residents expressed vague concerns that the project was being proposed in the wrong location, but without pinpointing any actual impact from the project. Arizona Water communicated to the residents that we have been looking for a site for well over a decade, including U.S. Forest Service property nearby. The USFS has been clear from the beginning that they discourage the use of USFS property.

Loss of tax revenue – After the project is complete, Arizona Water estimates it will pay approximately \$27,000 annually in property taxes.

Loss of residential property – Some residents worried that a water storage facility should not be built on one of the few residential lots still available in that part of Sedona. Arizona Water showed the residents photos of many significant water infrastructure locations right in residential areas.

c. Concerns, issues and problems the applicant is unwilling or unable to address, and why.

The most common comment we get is that the project should be built at an alternative location.

Our response to residents is that the need for the project is real and that the alternatives were examined previously and found wanting. Many suggested that USFS land nearby would be a better alternative, but the USFS project manager Judy Adams told us directly that USFS land cannot be developed if private property is available.

The USFS position seems very clear and convinced Arizona Water that we should not pursue additional locations on USFS land.

Appendices

Meeting 1 Documents

ARIZONA WATER COMPANY

65 COFFEE POT DRIVE, SUITE 7, SEDONA, AZ 86336-4554 PHONE: (928) 282-7092 • FAX: (928) 282-6131 • TOLL FREE: (800) 649-8393 • www.azwater.com

February 28, 2017

Dear Neighbor,

Arizona Water Company invites you to join us at a community meeting at the Sedona United Methodist Church located at 110 Indian Cliffs Road, Sedona on Wednesday, March 15 at 6 pm to discuss the details of our proposed East Sedona Water Storage Facility.

Our application to develop this project was filed with the City of Sedona on January 17, 2017. All important documents, including a drawing of what the site is anticipated to look like when completed, may be viewed on our web page, which you can find at www.azwater.com.

The project will include the following facilities:

- Water storage tank with up to 1.5 million gallon capacity.
- Most of the tank will not be visible because it will be built underground. Operational facilities
 will be built on top of the reservoir in an architectural style building similar to surrounding
 homes.
- A booster pump station capable delivering up to 3000 gallons per minute.

Participating in the meeting for the company will be Fred Schneider, Vice President of Engineering, and Keith Self, Division Manager for the Sedona area, and representatives of the company who have been hired to design and construct the project.

The East Sedona Water Storage Facility site layout was planned with careful attention to the City of Sedona requirements for open space, integration with the surrounding properties and preserving the delicate nature of Sedona.

To that end, we have identified a number of important elements that have been addressed during the planning process, including:

 Land use and site organization in relation to building form, character and scale of existing and proposed development.

- Sensitivity and nature of adjoining land uses.
- Location of property boundaries and setbacks.
- Location of adjacent roads, driveways, off-street vehicular connections, pedestrian ways, access points and easements.
- Existing surrounding structures and other improvements.

Thank you for taking the time to participate in this process. We look forward to seeing you at the meeting.

Sincerely,

Keith Self

Division Manager

Arizona Water Company

East Sedona Water Storage Facility Project



Artist's rendering of proposed project from Highway 179 and West Mallard Drive.

Community Participation Meeting

Arizona Water Company recently applied to the City of Sedona to build an underground drinking water storage facility in your neighborhood and we want to make sure you are thoroughly informed about the project and the approval process.

The company has completed a water resource master plan that concludes that the east Sedona area needs additional storage capacity in order to make sure the community is reliably and adequately served.

After years of careful consideration, we are proposing to build the East Sedona Water Storage Facility on property the Arizona Water owns at the intersection of West Mallard Drive and Highway 179.

Our application to develop this project was filed with the City of Sedona on January 17, 2017. All important documents, including an artist's rendering of what we anticipate the site to look like when completed, may be viewed on our web page at www.azwater.com.

Thank you for taking the time to participate in this community meeting. Working with neighbors and stakeholders on significant projects like this one is of vital importance for maintaining the beauty and the spirit of the Sedona community.

We want to make sure your comments are accurately understood and taken into consideration so we ask that you write down your question on one of the cards available

around the room. Please include your name and address. If you would prefer to keep in touch via email, please include your email address, as well.

Your concerns and questions will be included in a report to the City's Community

Development Department for consideration during the Conditional Use Permit (CUP) approval process.

Project Description

As noted earlier, our proposed design places nearly all of the reservoir underground, making it virtually invisible to neighbors and passers-by. A structure built atop the reservoir will approximate the size and architectural style of a local residences and be heavily sound proofed to mitigate sound of mechanical equipment needed to operate the reservoir. Key points of the project include:

- Water storage reservoir to hold up to 1.5 million gallons
- Booster pumps capable delivering up to 3,000 gallons per minute into the local water system
- Reservoir will be underground, virtually invisible
- Booster pumps and other operating equipment will be housed in a structure built on top
 of the reservoir in an architectural style similar to surrounding homes.

The East Sedona Water Storage Facility site layout was planned with careful attention to the City of Sedona requirements for open space, integration with the surrounding properties and preserving the delicate nature of Sedona.

To that end, we have identified a number of important elements that have been addressed during our planning process, including:

- Land use and site organization in relation to building form, character and scale of existing and proposed development.
- Sensitivity and nature of adjoining land uses.
- Location of property boundaries and setbacks.

- Location of adjacent roads, driveways, off-street vehicular connections, pedestrian ways, access points and easements.
- Existing structures and other built improvements.
- Other features of the site and/or surrounding area that may be impacted by or may impact the proposed development.



Overhead view of project site with artist's rendering. Building will be similar to neighboring homes.

Conditional Use Permit Process

The CUP approval process is designed to ensure that the proposed project is in compliance with the various sections of the Sedona Land Development Code (SLDC). The CUP process includes approval for site use, site plan, landscaping plan, setbacks and building concept including architecture and construction material, site access and drainage.

Once the CUP is approved, the project can then proceed to detailed design where City safety, code and building reviews are required. Site plan and building permits are required. State permits will be acquired from the Arizona Department of Environmental Quality including an Approval to Construct, and Approval of Construction.

Name Address Cmail Ahaut Tom & Sharon Koulds 225 Geneva @ amail.com 326-3725 Per Ledeen 91 W. Malary 608 944 Pat Cayoum POBOX 3875 pat 20mR/madison. a 1876 Description 55 Bell Reds Triel

Duke School 20stil Barcator LSaselengco, com 646-349

Lyrna Saubs, 407 Lesey Dr. 2039909

Fliri Deand 100 Peneloption gerbeau ams. com Kerry > Cety of Sedown Marth > Cety of Sedown

Address Name emai! Shone # MRRY & FERN KANE 332 ACACIA LIKANE @ MSN. com Carol Roland & Duand Roland 804 W Chapel Comailion Barlie Barker 94 W. Mallard Dr., Sedena AZ 86336 Bruce AJELAT 92 W Mallerd Dr Sectione

Michelle McGeary Confederal Meheuringdona

CAROCE HAMPTON & DANE (D CATHEDON L.L. HAMPTONG PARK)

COM

CONTROLL L.L. HAMPTONG COM

CONTROLL COM

CONTROLL

CO Katie Sluder 91 W. Mallard, Sedona ADRUAM PARKOR 93 W MAKLADO DE STOOMA AR 86736 MARILYN PAINCHAUD YEX ACACIA SEDONA AZ8633C Retrick Dummigan_ 123E Mallard Dr SEDONA AZ Row MINZER HOT SCACIA DR Kovin & Desice Brackin 95 WMalloud D JOHN MATTA 7580 N DOBSON & JANIAN 117 E. Mallard Dr. Sedona, AZ Dereg & Suzon Hanson 117 E. Mallard Dr. Sedona, AZ

	Arizona Water Company East Sedona Water Storage Facility
Name(AROL ROLAND & DUANE ROLAND 804 W. CHAPEL RD, SETONA AZ 86336
Address	804 W. CHAPLI RT, SETONA AZ 86336
Email <u><i>Call</i></u>	MOLWittnerogmail.com Phone 928.203.0669
Questions/Co	그렇게 한 가는 생각이 되었다. 그렇게 되었다. 그들은 그 사람들은 사람들은 사람들은 사람들이 되었다. 그 사람들은 그리는 그렇게 되었다. 그는 그를 가장하는 것이 그렇게 되었다. 그를 모르는 그를 다 되었다.
	SEE COMPLETEDY OPPOSED TO THIS PLAN.
	TANK DOS NOT BELONG IN QUE NEIGHBURHOOT
	PLAN IS FLAULED. YOU HAVE LEFT TOO MANY 15 OPEN TO POTENTIAL PROBLEMS.
	E HUELET'S SUGGESTION IS LERY GOOD!
() 	TSE RESEARCH H
3-15-17	

Arizona Water Company
East Sedona Water Storage Facility
Name H Beaudyn ,
Address 100 Penelabe May Sedona A 2 86336
Address 100 tenelape May Sedona AZ 86336 Email Gerbeau ams Acom Phone 728-203-9709
Questions/Comments
를 가는 사람들이 있다면 하는 것은 사람들이 있다면 하는 것이 없는 사
Why should this be slaved abutting
It Misidential late which loose tralice
as well as tad swenus to the city.
The sweet of these grighten will love
Their value squickly. There have to be
man ithe locations that the crule
3-15-17/

			Nater Company ater Storage Facility
Name	Barbra	Barker	
Address	94 W.	Mallard Dr.	, Gedona AZ 86836
Email :	bbarber	a) pld. net	Phone <u>(10,428-0810</u>
			sull be submitted to sciention design
	t be a	supplement	al emergency operate
3-15-17			

Arizona Water Company East Sedona Water Storage Facility
Name Tom & Sharon Foulds Address 125 Geneva Dr. (Mystic Kills) Email Sharonok 1 @ gmail.com Phone 480 316 3745
Address 225 Geneva Dr. (Mystic Kills)
Email sharonok 1 @ 9 Moil. com Phone 480 316 3725
Questions/Comments Understand the need but Win residental orea of Mystic Hills.
area of Mystic Hills.
Please hold meeting with Mystic Hills HOA for residence feedback
CONSIDER SMACKER TANKS IN THE MIDDLE
3-15-17 OF EVERY ROUNDABOUT ON 179

Arizona Water Company East Sedona Water Storage Facility
Name Marlene / Ron Hanson
Address 117 E. Mallard, Dr.
Email rhanson 2 D century fin k inst Phone (928) 282 2032
Questions/Comments Twi better ideas:
1. Bruce Auclat's iden to put it in
the ravine
2. Little Horse Trail expanded parking
2. Little Horse Trail expanded parking lot with water tank below
3-15-17

	Arizona Water Company East Sedona Water Storage Facility
Name #08	Camplell
Address 5.5	Bell Rock Trail
Email	Phone
Questions/Comments	
	Name of the American American American
	model of the project, might help overcome
horative	
	concerns. / Also would be good to present
this type	of model to Forest Service area
this type	of model to Forest Service area
this type	of model to Forest Service area
this type	

Arizona Water Company East Sedona Water Storage Facility
Name DAVID HAMPTON
Address 60 CATHED TAX ROCK TOTAL
Email DAAMSTON 170 GWALL, COM. Phone 303-859-8844
Questions/Comments
PROVIDE REALISTIC ASSISSMENT OF IMPACT
TO BESCHENTIAN NEIGHBOOK BLOWS
LONSTAUTION PHASE,
3-15-17 YOU ATTE NOT BONG HOVEST TO PUBLIC

	Arizona Water Company East Sedona Water Storage Facility
Name	Opecié HAMOTON
·推荐:"小形"数:	GO CATHED DA ROCK TRAIL
	U.C.Hampron@Japes.comPhone 303 859-8855
	ASE TIND ANDTHER LOCATION! WE DON'T WANT OMNERIAL WATER CACILITY IN DESIDENTIAL ADMA
	IT HAVE AN ISSUE WITH THE "WEED" ON THE
	UE NEED TO INVOLVE FOREST SERVICE IN THIS
	TION SET DISCUESION
3-15-17	WE ALE CONCERNSO ACSO THAT THERE WILL BE NO WA GENERATOR ON SITE IN CASE OF EMBRESHOW

Comments from cards submitted after the March community meeting

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: 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 will show examples of that later in this presentation.

Building in the roundabouts would be impossible.

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

Response: We have been working to set up a meeting with the Mystic Hills HOA. Back-up power can be added to the project.

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 effect on home values or tax revenue. In fact, a high-value project would expand tax revenue, not decrease it.

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.

Email 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 have looked at the CC&Rs and we have been trying to schedule a meeting with the Mystic Hills Design Review Committee.

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.

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.

Comments submitted via Ron Eland, reporter for the Red Rock News

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.

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.

ARIZONA WATER COMPANY

65 COFFEE POT DRIVE, SUITE 7, SEDONA, AZ 86336-4554 PHONE: (928) 282-7092 • FAX: (928) 282-6131 • TOLL FREE: (800) 649-8393 • www.azwater.com

July 13, 2017

Bruce Huelat
Ron Minzer
Larry Kane
Kevin Brackin
Mystic Hills Homeowner Association
Design Review Board

Via email

Dear Design Review Board Members:

At your request, Arizona Water Company has reviewed the list of questions you forwarded to us about our proposed Water Storage Facility project in your community and provided our answers to each. We would now like to move ahead and set a time for a meeting between the Design Review Board and our project team.

We look forward to discussing the issues that concern the Mystic Hills community.

Sincerely,

Keith Self

Verde Valley Division Manager

Questions and Answers for Mystic Hills Homeowners Association Design Review Board

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 gallons.

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.

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 documents. 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 in-excusable. 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. What little runoff there is, can be captured on site by using retention basins. 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.

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.

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.

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 other sites for several years. This one meets our criteria very well.

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.

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.

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. 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.

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.

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.

This is not an end all of questions. However, it is a meaningful start towards developing a positive solution. They require facts and detail in the answer. Once you have answers to the above we would welcome meaningful discussions with the City and AWC.

Sincerely, Concerned Citizens of Sedona

Bruce Huelat 92 W. Mallard

Ron Minzer 407 Acacia

Larry Kane 332 Acacia

Kevin Brackin 95 W. Mallard

Meeting 2 Documents

ARIZONA WATER COMPANY

December 21, 2017

Dear Neighbor,

As you may know, Arizona Water Company is proposing to construct an underground drinking water storage facility in your community. In order to keep residents and government officials aware of our activities, we will host a second community meeting on the subject:

East Sedona Water Storage Facility Community Meeting Wednesday, January 10, 2018 6 pm to 8 pm Sedona United Methodist Church 110 Indian Cliffs Road Sedona, AZ

At our first community meeting in March, residents raised a number of questions and we have done our best to answer them all. In addition, we have received questions from the Mystic Hills Homeowners Association's Design Review Board, which have also been answered. Please check our project website at www.azwater.com/east-sedona-water-storage/ for all those materials.

As a reminder, the project will include:

- Water storage tank with a capacity to hold between 1 million and 1.5 million gallons.
- Most of the tank will be underground and not visible to neighbors or drivers on Highway
 179
- Operating equipment, including booster pumps capable of delivering 3,000 gallons per minute, will be inside a building on top of the tank that will be designed to look like neighboring homes.

At the upcoming meeting, we will present more detail about construction techniques and other technical issues. In addition, we will report on our meeting with the Mystic Hills HOA Design Review Board and our meeting with Judy Adams of the US Forest Service.

Thank you again for your participation in this process. We look forward to seeing you at the meeting.

Sincerely,

Keith Self Verde Valley Division Manager Arizona Water Company





ARIZONA WATER COMPANY

East Sedona Water Storage Facility

January 10, 2018 Community Meeting



LOCATION



Mesa, Arizona Range Rider

Right next door.



Scottsdale, Arizona Bell Rd. and 108th St.

Right next door.



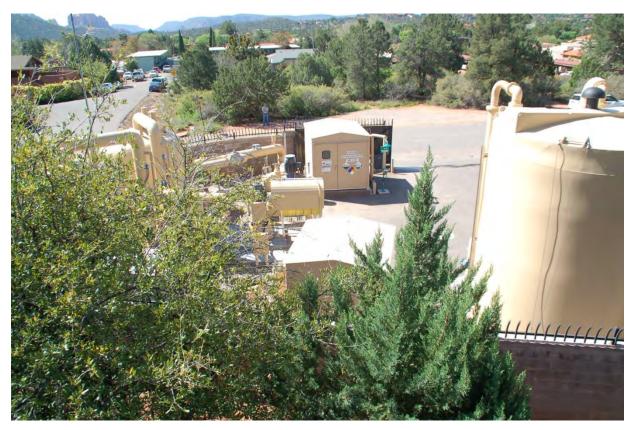
Scottsdale, Arizona Pima and Thomas

Right next door.



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.



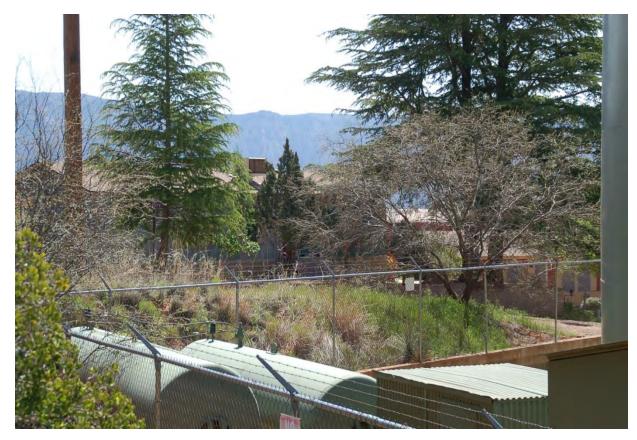
View of well and arsenic treatment system and work yard from the Adobe Grand Villas 2nd floor.

Right next door.



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

Right next door.



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

Right next door.



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

Right next door.



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

Right next door.



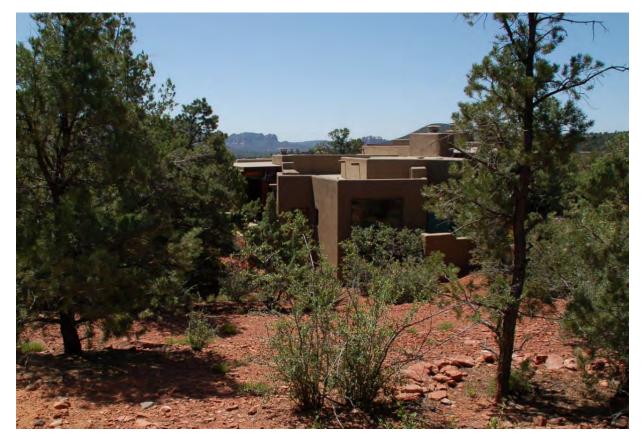
Shadow Rock Storage Tank, 700,000 gallons and visible from many of homes in the area.

Right next door.



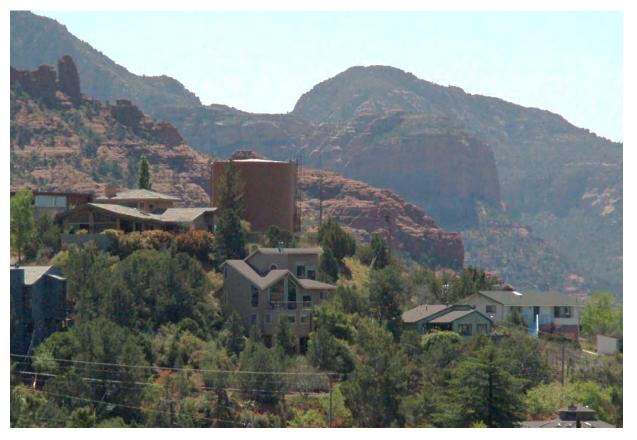
Jordan Park neighborhood, one million gallon storage tank.

Right next door.



Jordan Park home adjacent to one million gallon storage tank.

Right next door.



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

Right next door.



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.

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 Page 11 of 17

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.

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.

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.

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.

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.

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.

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 documents. 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 in-excusable. 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Meeting 3 Documents

April 2018 15

ARIZONA WATER COMPANY

January February 2, 2018

Dear Neighbor,

At our community meeting on January 10th, Arizona Water Company was asked to host an additional meeting specifically to discuss the effect of our proposed East Sedona Water Storage Facility on storm water runoff.

We have scheduled the meeting for:

Stormwater Runoff Meeting Wednesday, February 21, 2018 6 pm to 8 pm Sedona United Methodist Church 110 Indian Cliffs Road Sedona, AZ

Per request, we intend to have a discussion of the technical details of how stormwater runoff is calculated and what options might be available to mitigate it when necessary.

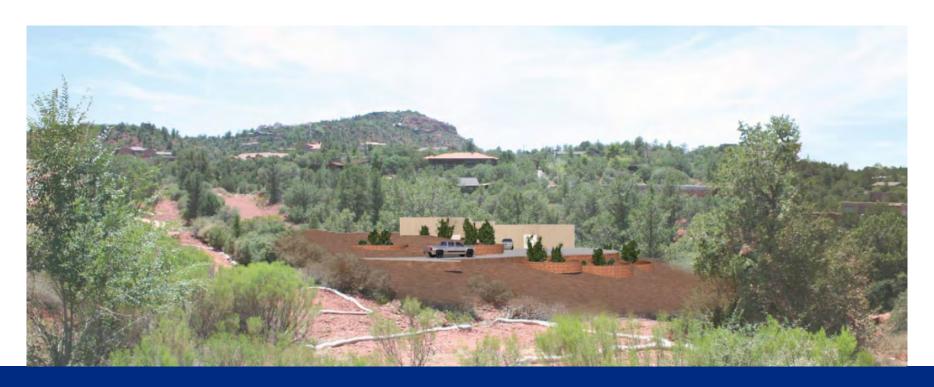
As a reminder, the proposed project includes:

- Water storage tank with a capacity to hold up to 1.5 million gallons
- Most of the tank will be underground and not visible to neighbors or drivers on Highway 179
- Operating equipment, including booster pumps capable of delivering 3,000 gallons per minute, will be inside a building on top of the tank that will be designed to look like neighboring homes

Thank you again for your participation in this process. We look forward to seeing you at the meeting.

Sincerely,

Keith Self Verde Valley Division Manager Arizona Water Company





ARIZONA WATER COMPANY

East Sedona Water Storage Facility

February 21, 2018 Community Meeting



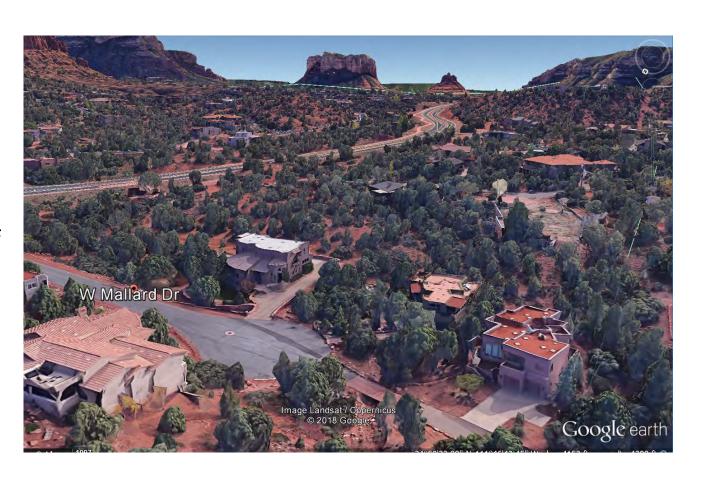
STORMWATER RUNOFF

Issue: Runoff sometimes flows out of the wash at bottlenecks in front of several homes on W. Mallard

Questions:

How will Arizona Water's project affect runoff?

How is stormwater runoff calculated?



Arizona Water Company's Existing Site



- 1.05 Acres (45,738 sq. ft.) Two lots
- Topsoil is 2 to 3.5 ft. +/deep
- Sloped
- Site drains to North and Southwest



Sedona Routinely Handles Drainage Issues

City's Land Development Code includes a well-defined formula for calculating runoff and managing flood risk.

Rational Drainage Equation: $Q(cfs) = C \times I \times A$

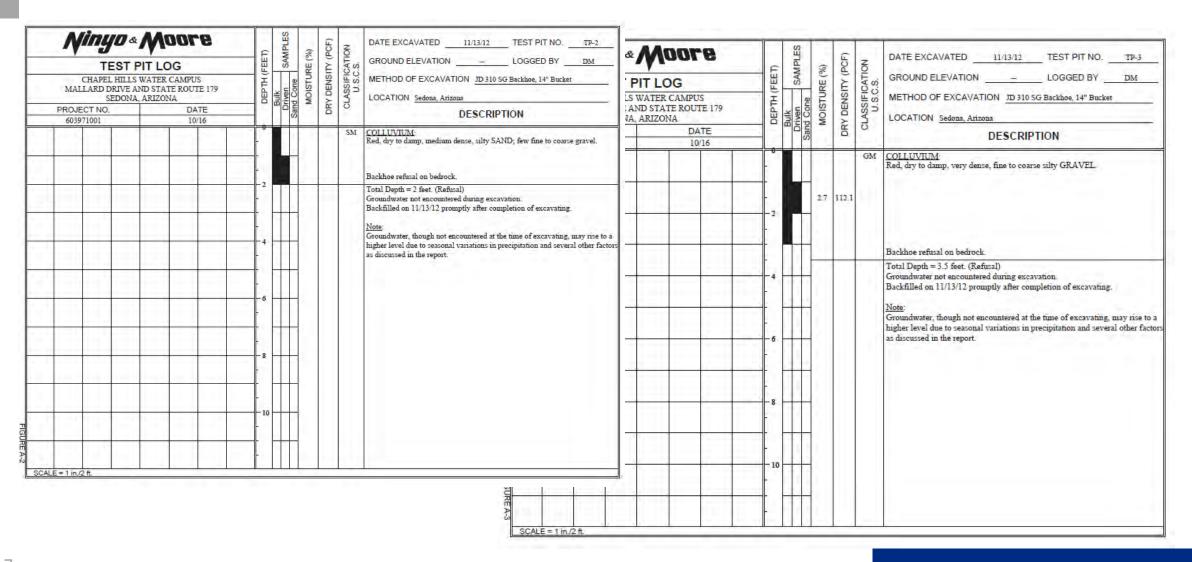
- **Q** Quantity of stormwater runoff, in cubic feet per second (cfs)
- C Runoff Coefficient determines the amount of rainfall that is NOT absorbed by the ground
- Precipitation. Drainage Design Table 8.1 Applicable Sections
- **A** Area

Determining the Coefficient: Start with Type of Soil Q=C x I x A

Four factors as defined by the U. S. Department of Agriculture, Hydrologic Soils Group

- **A** Soils having high infiltration rates even when thoroughly wetted and consisting chiefly of deep and well to excessively drained sands and gravels. These soils have a high rate of water transmission.
- **B** Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- **C** Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.
- **D** Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

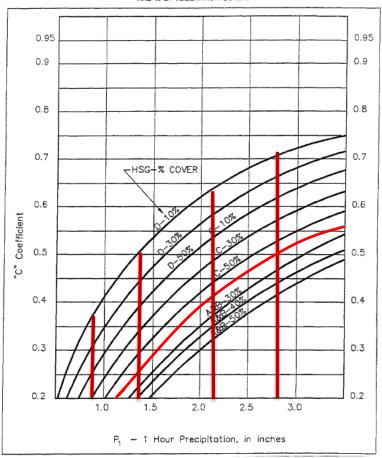
Arizona Water Company Site Analysis $Q = C \times I \times A$



Arizona Water Company Site Analysis Q = C x I x A

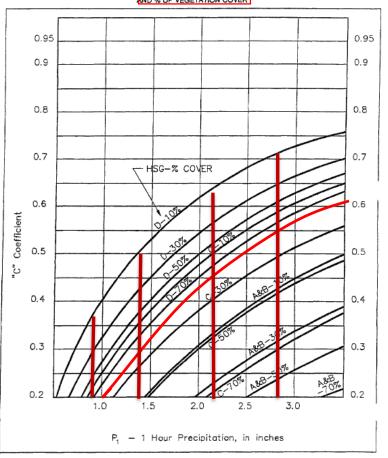
FIGURE 2-4 RATIONAL "C" COEFFICIENT DESERT (CACTUS, GRASS & BRUSH)

AS A FUNCTION OF RAINFALL DEPTH, HYDROLOGIC SOIL GROUP (HSG), AND % OF VEGETATION COVER.





AS A FUNCTION OF MAINFALL DEPTH, HYDROLOGIC SOIL GROUP (HSG),



Precipitation and Drainage Design – Tables 8.2, 8.3 Q = C x I x A

Table 8.2

Mean Precipitation Frequency Estimates

Tables copied from Sedona Land Development Code

Freq	5-	10-	15-	30-	60-	120-			40.1	0.4.1	2-	4-	7_	1∩₋	2∩-													
(yr)	min	min	min	min	min	min	3-hr	6-hr	12-hr	24-hr	day	day	_							-	0.0							
1	0.21	0.33	0.40	0.54	0.67	0.80	0.86	1.05	1.34	1.72	2.02	2.33	Table 8.3															
2	0.28	0.42	0.52	0.70	0.86	1.01	1.08	1.30	1.66	2.14	2.52	2.91					Uppe	r Limit	Precip	itatio	n Fred	quency	Estim	ates				
5	0.37	0.56	0.70	0.94	1.16	1.33	1.39	1.61	2.03	2.66	3.14	3.65	Freq	5-	10-	15-	30-	60-	120-	2 br	/ bs	10 hr	24 bs	2-	4-	7-	10-	20-
10	0.45	0.68	0.85	1.14	1.41	1.60	1.65	1.89	2.33	3.08	3.64	4.25	(yr)	min	min	min	min	min	min	3-nr	6-Nr	12-nr	24-hr	day	day	day	day	day
25	0.56	0.85	1.06	1.43	1.77	1.99		2.28	2.75	3.67	4.33		1	0.26	0.39	0.48	0.65	0.80	0.93	0.99	1.16	1.49	1.88	2.23	2.57	3.00	3.43	4.43
25	0.50	0.00	1.00	1.43	1.77					3.07	4.33		2	0.33	0.50	0.62	0.83	1.03	1.18	1.26	1.44	1.84	2.36	2.79	3.21	3.75	4.27	5.50
50	0.66	1.00	1.24	1.67	2.06	2.31	2.35	2.60	3.07	4.13	4.87	5.78																
100	0.76	1.15	1.43	1.93	2.38	2.67	2.71	2.96	3.41	4.61	5.44	6.50	5	0.44	0.67	0.83	1.12	1.39	1.55	1.60	1.79	2.24	2.94	3.47	4.02	4.64	5.26	6.68
200	0.87	1.32	1.64	2.20	2.73	3.06	3 10	3.32	3.75	5.10	6.03	7.25	10	0.54	0.82	1.01	1.36	1.69	1.87	1.91	2.10	2.57	3.41	4.01	4.68	5.39	6.05	7.56
500	1.03	1.56	1.94	2.61	3.23	3.63		3.87		5.76	6.83		25	0.67	1.02	1.26	1.70	2.10	2.31	2.34	2.54	3.03	4.05	4.77	5.60	6.43	7.10	8.70
300	1.03	1.30	1.94	2.01	3.23	3.03	3.00	3.07	4.22	3.70	0.03	0.30	50	0.78	1.19	1.47	1.98	2.46	2.69	2.71	2.89	3.38	4.55	5.36	6.34	7.27	7 94	9.56
1,000	1.16	1.77	2.19	2.95	3.65	4.10	4.13	4.31	4.60	6.30	7.46	9.13																
													100	0.90	1.37	1.70	2.29	2.84	3.12	3.14	3.29	3.76	5.08	5.99	7.14	8.16	8.80	10.40
													200	1.03	1.57	1.95	2.63	3.25	3.57	3.59	3.72	4.14	5.63	6.66	7.97	9.06	9.66	11.21
													500	1.23	1.88	2.33	3.12	3.88	4.24	4.27	4.37	4.70	6.40	7.56	9.18	10.37	10.84	12.26
9													1,000	1.40	2.13	2.65	3.56	4.41	4.79	4.85		- ا ۸	7.0.10	~ \	/o+			2000

		Storm Frequency:	25-yr. 100-yr. (check)
		Froude No.:	FN ≤ 0.86; 1.13 ≤ FN ≤ 2.0
		Freeboard (Minimum):	110 3 0.00, 1.13 3 110 3 2.0
		Cubaritical Flaur	FD 0.25*[i.e. (.2/2a)] (1.6+ main.)
		Subcritical Flow	$FB = 0.25*[y+(v^2/2g)] (1-ft. min.)$
		Supercritical Flow Maintenance Road:	FB = 0.25*[y+(v ² /2g)] (2-ft. min.) 12 ft. wide, 1 side of
		iviaimenance Roau.	channel
		Maximum Velocity:	per channel lining material
	Open	Maximum Side Slope:	(ss = from slope stability analysis)
4.0	Channels	Vegetal/Earth	3:1 or ss
		Loose Riprap	3:1 or ss
		Rigid Lining	SS
		Shotcrete	1:1
		Soil Cement	1:1
		Building Setback from Channel Bank and Floodway:	1.5 x the channel depth, unless otherwise approved by the City Engineer for engineering reasons. However, in any case, the more restrictive requirements within this article shall apply.
		Storm Frequency:	2-, 10-, 25-, and 100-yr. storms
		Criteria:	post-proj. Q ≤ pre-proj. Q
		When Required:	1 acre or larger development or when post- development flow will exceed pre-development flow by ≥ 1 cfs.
		Maintenance Road:	12-ft. access road
		Maximum Depth:	
5.0		Parking Areas	
	Storage	Emergency Spillway:	pass post-developed 100-yr. Q
		Maximum Drain Time:	12 hrs. upstream watershed areas ≤ 10 ac. and 24 hrs. for an upstream watershed area > 10 ac.
		Freeboard (Minimum):	1 ft. (post developed 100-yr. event)
		Min. Principal Outlet:	12 inch
		Maximum Side Slopes:	
		Depth < 3 ft.	2:1, protected; 3:1, unprotected
		Depth ≥ 3 ft.	4:1

Sedona Routinely Handles Runoff and Flooding Issues

$$Q = C \times X \times A$$

Table Copied from Sedona Land Development Code

Runoff Calculations

 $\cdot Q = C \times I \times A$

Yavapai County Drainage Policies & Standards	V=C(P/12)A	
100 Yr- 1 Hr Storm Rainfall Depth, inch	1 784	City of Sedona Precipitation Frequency Estimates

Existing												
Description – Existing	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft							
Grass and Brush - Area 1	4,400	0.10	0.55	0.16	0.01	573						
Grass and Brush - Area 2	41,338	0.95	0.55	1.48	0.12	5,381						
Pavement & Rooftops												
Roadway/Concrete Pads	0	0.00		0.00	0.000	0						
Reservoir	0	0.00		0.00	0.000	0						
Reservoir 10 ft backfill ring												
Total	45,738	1.05	0.55	1.64	0.1	5,954						

	<u> </u>	<u>uture</u>				
Description - Proposed	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft	Runoff Volume, cft
Grass and Brush - Area 1	4,400	0.10	0.55	0.16	0.01	573
Grass and Brush - Area 2	20,357	0.47	0.55	0.73	0.06	2,650
Hillslope Sonoran Desert - Landscaped area above reservoir	2,838	0.07	0.55	0.10	0.01	369
Pavement & Rooftops						
Roadway/Concrete Pads	360	0.01	0.88	0.02	0.002	75
Reservoir	7,186	0.16	1.00	0.47	0.039	1,701
Reservoir 10 ft backfill ring	10,598	0.24	0.50	0.35	0.03	1,254
Total	45,738	1.05	0.61	1.82	0.15	6,622
Excess Runoff - Area 1 (Retention Volume Required, cft)						0
Excess Runoff - Area 2 (Retention Volume Required, cft)						668
Excess Runoff (Retention Volume Required, cft)						668

Runoff Coefficient Sensitivity Analysis Runoff increase still < 1 cfs of existing conditions

Yavapai County Drainage Policies & Standards	V=C(P/12)A	
100 Yr- 1 Hr Storm Rainfall Depth, inch	2.84	Sedona Precipitation Frequency Estimates

	Existing											
Description - Existing	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft	Runoff Volume, cft						
Grass and Brush - Area 1	4,400	0.10	0.70	0.20	0.02	729						
Grass and Brush - Area 2	41,338	0.95	0.70	1.89	0.16	6,848						
Pavement & Rooftopes												
Roadway/Concrete Pads	0	0.00		0.00	0.000	0						
Reservoir	0	0.00		0.00	0.000	0						
Reservoir 10 ft backfill ring												
Total	45,738	1.05	0.70	2.09	0.2	7,577						

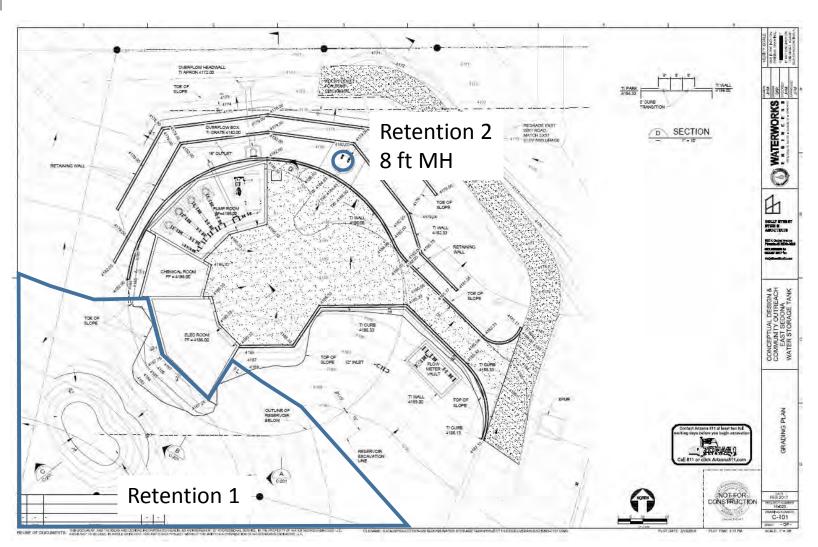
	Fut	ture				
Description - Proposed	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft	Runoff Volume, cft
Grass and Brush - Area 1	4,400	0.10	0.70	0.20	0.02	729
Grass and Brush - Area 2	20,357	0.47	0.70	0.93	0.08	3,372
Hillslope Sonoran Desert - Landscaped area above reservoir	2,838	0.07	0.70	0.13	0.01	470
Pavement & Rooftopes						
Roadway/Concrete Pads	360	0.01	0.88	0.02	0.002	75
Reservoir	7,186	0.16	1.00	0.47	0.039	1,701
Reservoir 10 ft backfill ring	10,598	0.24	0.50	0.35	0.03	1,254
Total	45,738	1.05	0.70	2.09	0.17	7,601
Excess Runoff - Area 1 (Retention Volume Required, cft)						0
Excess Runoff - Area 2 (Retention Volume Required, cft)						24
Excess Runoff (Retention Volume Required, cft)						24

	V=C(P/12)	
Yavapai County Drainage Policies & Standards	Α	
100 Yr- 1 Hr Storm Rainfall Depth, inch	2.84	Sedona Precipitation Frequency Estimates

	Existing											
Description - Existing	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft	Runoff Volume, cft						
Grass and Brush - Area 1	4,400	0.10	0.25	0.07	0.01	260						
Grass and Brush - Area 2	41,338	0.95	0.25	0.67	0.06	2,446						
Pavement & Rooftopes												
Roadway/Concrete Pads	0	0.00		0.00	0.000	0						
Reservoir	0	0.00		0.00	0.000	0						
Reservoir 10 ft backfill ring												
Total	45,738	1.05	0.25	0.75	0.1	2,706						

	Futi	<u>ure</u>				
Description - Proposed	Area, sqft	Area, acres	C - Value	Peak Discharge, cfs	Runoff Volume, acre-ft	Runoff Volume cft
Grass and Brush - Area 1	4,400	0.10	0.25	0.07	0.01	260
Grass and Brush - Area 2	20,357	0.47	0.25	0.33	0.03	1,204
Hillslope Sonoran Desert - Landscaped area above reservoir	2,838	0.07	0.25	0.05	0.00	168
Pavement & Rooftopes						
Roadway/Concrete Pads	360	0.01	0.88	0.02	0.002	75
Reservoir	7,186	0.16	1.00	0.47	0.039	1,701
Reservoir 10 ft backfill ring	10,598	0.24	0.50	0.35	0.03	1,254
Total	45,738	1.05	0.43	1.28	0.11	4,662
Excess Runoff - Area 1 (Retention Volume Required, cft)						0
Excess Runoff - Area 2 (Retention Volume Required, cft)						1,956
Excess Runoff (Retention Volume Required, cft)						1,956

Project Conditions



Existing Site

- 1.05 acres
- 113 ft. diameter tank
- 10 ft. ring around tank– sand
- Building above tank
- 2,840 sq.ft. soil cover over tank
- Impermeable area –
 7,200 sq.ft.

Retention Basin Calculations – 1 hr. Rain Duration

						Retention				
						Storm Water				
					Match	Proposed	Proposed		Flow w	
Storm	Inch Exist	Project			Existing	Retention	Retention		Proposed	%
Frequency	in 1 hr Cndts	Cndts	Increase	Required	Cndts	1	2	Total	Retention	Reduction
(yr)	(cfs)	(cfs)	(cfs)	(cft)	(cft)	(cft)	(cft)	(cft)	(cfs)	%
2	0.86 0.18	0.36	0.18	0	657	450	1005	1455	0.00	100.0%
10	1.41 0.44	0.68	0.24	0	865	450	1005	1455	0.28	59.2%
25	2.1 0.99	1.22	0.22	0	811	450	1005	1455	0.81	33.2%
100	2.84 1.64	1.82	0.18	0	668	450	1005	1455	1.42	22.2%

- Retention 1 located along the southwest corner of the site
- Retention 2 8 ft. manhole located north of the proposed tank

Retention Basin Calculations – 2 hr. Rain Duration

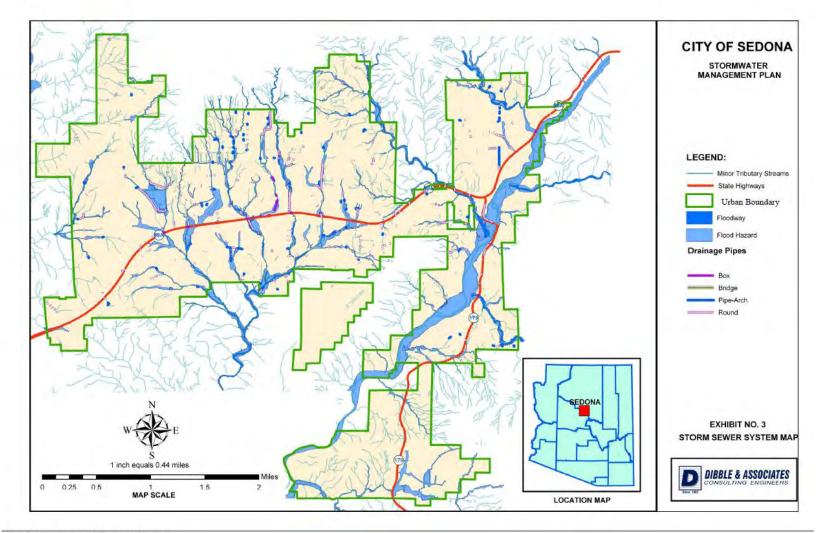
							Retention				
										Storm Water	
						Match	Proposed	Proposed		Flow w	
Storm	Inch in	Exist	Project			Existing	Retention	Retention	Total	Proposed	%
Frequency	2 hrs	Cndts	Cndts	Increase	Required	Cdts	1	2	Retention	Retention	Reduction
(yr)		(cfs)	(cfs)	(cfs)	(cft)	(cft)	(cft)	(cft)	(cft)	(cfs)	%
2	1.01	0.58	0.65	0.07	0	238	450	1005	1455	0.24	62.3%
10	1.6	0.92	1.03	0.10	0	376	450	1005	1455	0.62	39.3%
25	2.31	1.33	1.48	0.15	0	543	450	1005	1455	1.08	27.2%
100	3.12	1.80	2.00	0.20	0	734	450	1005	1455	1.60	20.2%

- Retention 1 located along the southwest corner of the site
- Retention 2 8 ft. manhole located north of the proposed tank



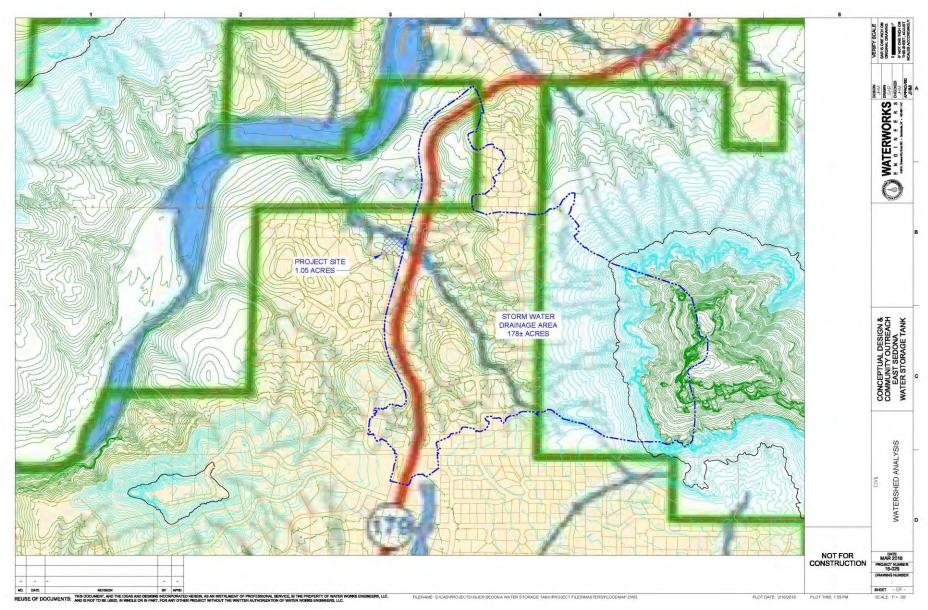
WATERSHED DISCUSSSION

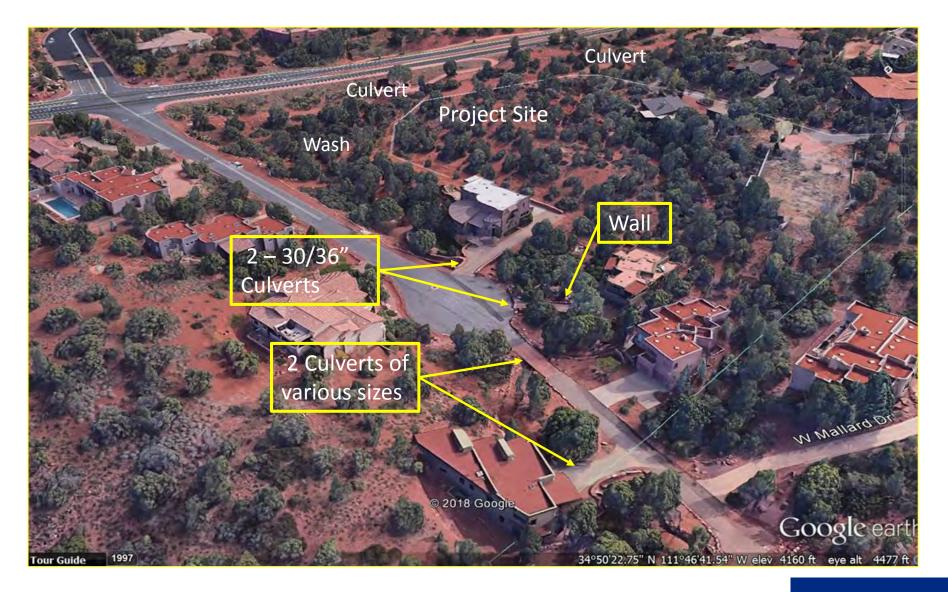
Sedona Watersheds



City of Sedona - Stormwater Management Program

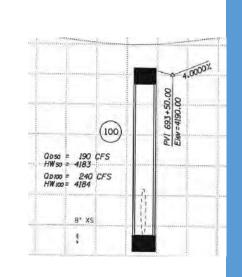
Sedona Watersheds

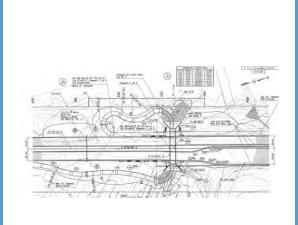


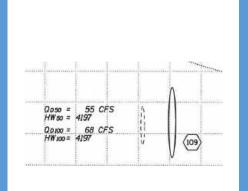


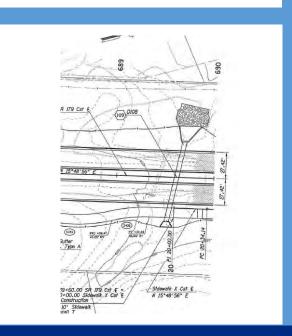
On Site Runoff Compared to Wash Flows

- Two culverts convey storm water runoff from east to west of SR 179
- Culvert information obtained from ADOT drawings:
 - Culvert 100 box culvert
 - 100 yr. storm flow 240 cfs
 - 50 yr. storm flow 190 cfs
 - Culvert 109 54" pipe
 - 100 yr. storm flow 68 cfs
 - 50 yr. storm flow 55 cfs
- Additional drainage from SR 179
- In comparison, site runoff is less than 1% of flow in wash









Unnamed Wash Floodplain Analysis

- USACE HEC-RAS floodplain modeling software
- Existing and proposed conditions
- 100-year (standard) and 50-year storm events, Discharges from ADOT plans
- No ineffective flow areas, no obstructions, and no structures
- Manning's roughness values
 - 0.040 main channel
 - 0.050 overbanks
- Subcritical flow regime
 - Standard for natural watercourses
 - Downstream boundary condition only



Floodplain Analysis: Boundary Condition

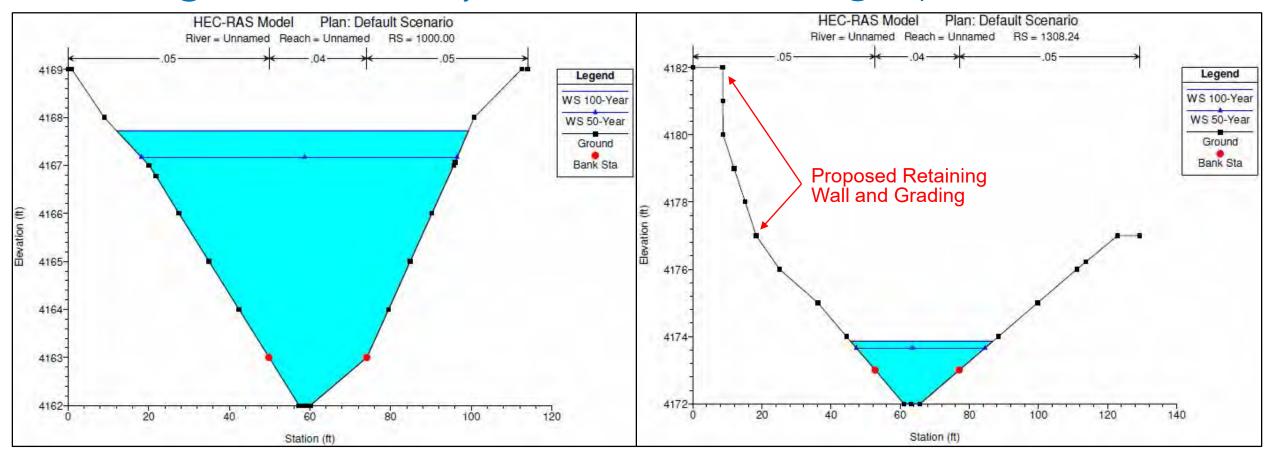
- Known water surface elevation
- Existing culverts and driveway impede natural flowpath
- Modeled as a combination of culverts and weir
 - CulvertMaster
 - FlowMaster
- Resulted in ~5.7' of flow depth → WSE



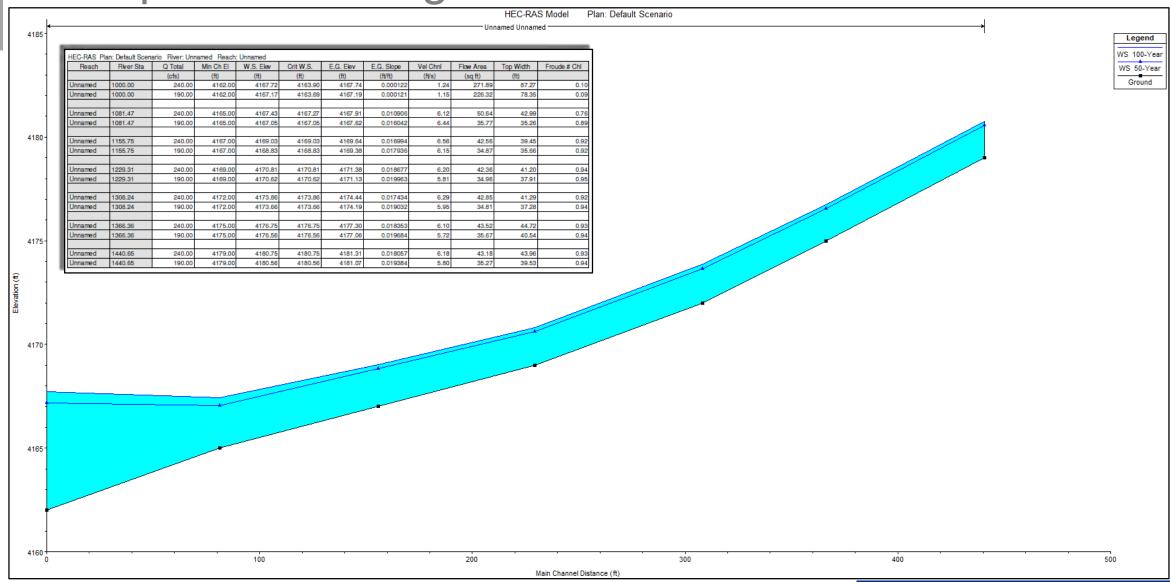
Floodplain Modeling Results: Cross-Sections

@ Downstream Driveway

@ Proposed Tank



Floodplain Modeling Results: Flowline Profile



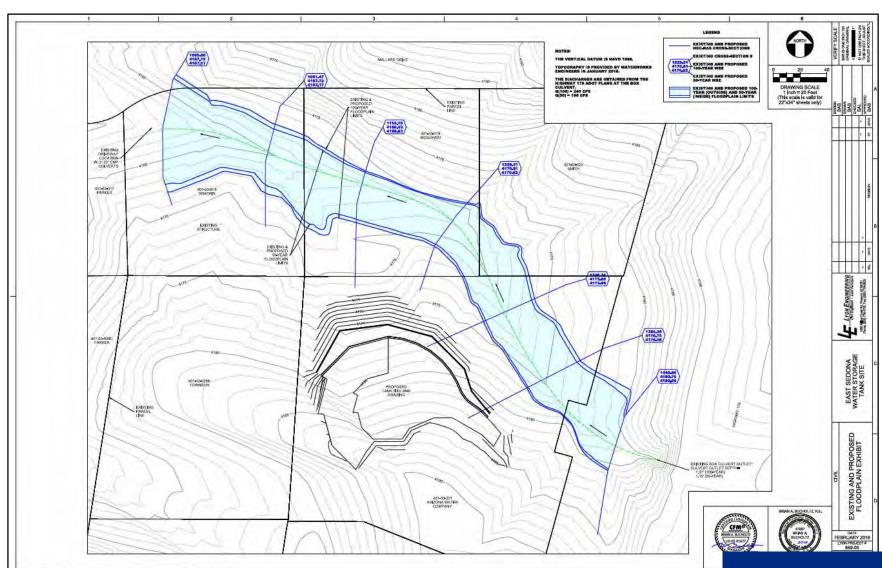
Floodplain Modeling Results: WSEs

100-Year Floodplain Results								
Cross-Section	Existing WSE	Proposed WSE	Difference (ft)					
1000.00	4167.72	4167.72	0.00					
1081.47	4167.72	4167.72	0.00					
1155.75	4169.03	4169.03	0.00					
1229.31	4170.81	4170.81	0.00					
1308.24	4173.86	4173.86	0.00					
1366.36	4176.75	4176.75	0.00					
1440.65	4180.75	4180.75	0.00					

50-Year Floodplain Results

Cross-Section	Existing WSE	Proposed WSE	Difference (ft)		
1000.00	4167.17	4167.17	0.00		
1081.47	4167.17	4167.17	0.00		
1155.75	4168.83	4168.83	0.00		
1229.31	4170.62	4170.62	0.00		
1308.24	4173.66	4173.66	0.00		
1366.36	4176.56	4176.56	0.00		
1440.65	4180.56	4180.56	0.00		

Floodplain Modeling Results: Map



Contact Information

April 2018 16

Denise Barnhart 20 Juniper Trl Sedona, AZ 86336 Gerri Beaudin 100 Penelope Way Sedona, AZ 86336-6921

Marilyn Painchaud 404 Acacia Drive Sedona, AZ 86336-6966 Ron Minzer 407 Acacia Drive Sedona, AZ 86336

Patrick Dummigan 123 E. Mallard Drive Sedona, AZ 86336-6962

Marlene & Ron Hanson 117 E. Mallard Drive Sedona, AZ 86336-6960

Doug & Suzanne Hawks PO Box 2276 Sedona, AZ 86339-2276

Jake Sefton 20 Stutz Bearcat Drive Sedona, AZ 86336

Myrna Jacobs 407 Acacia Drive Sedona, AZ 86336-6967

AP IDENTIFIE	APN	OWNER NAME	SITUS ADDRESS	SITUS CITY	SITUS STATE	SITUS ZIPCODE	OWNER ADDRESS	OWNER CITY	OWNER STATE (OWNER ZIPCODE	OWNER PHONE NUMBER
	7.0.10		T. T. TIO DITEO	10,100 0,11	0.1000.1.12	3.1.00 2.1.0002	2 211710 511200	z inten on i	Z.M.Z.O.M.E		
29	40133008C	PARKER RODERICK J	60 BELL ROCK TRL	SEDONA	AZ	86336	PO BOX 417	WHITNEY POINT	NY	13862	NO CURRENT AWC ACCT - FB 10/2006
14	40173009	HOWDEN DAVID BRUCE	311 ACACIA DR	SEDONA	AZ	86336	7642 W MAUI LN	PEORIA	AZ	85381	NO AWC ACCT
15	40173010	MILLER ROBERT & MARYLU	309 ACACIA DR	SEDONA	AZ	86336	309 ACACIA DR	SEDONA	AZ	86336	201-652-1221
16	40173011	WALLS DALE L JT ; WALLS CATHERINE A JT	307 ACACIA DR	SEDONA	AZ	86336	8026 E FERZON TR	SCOTTSDALE	AZ	85258	NO AWC ACCT
11	40172020	FRICKE DANIEL & DONETTA A	303 ACACIA DR	SEDONA	AZ	86336	16112 LIVE OAK CIR	CANYON COUNTRY	CA	91387	NO AWC ACCT
10	40172021	MCKEE SHIRLEY J SURVIVING TRUSTEE; MCKEE J & S TRUST C/B/D	TS 107 E MALLARD DR	SEDONA	AZ	86336	107 E MALLARD DR	SEDONA	AZ	86336	928-282-0947
18	40172022	STAUB MA RVCBL LIVING TRUST DTD 4-21-06	99 E MALLARD DR	SEDONA	AZ	86336	8669 AUGUSTA LN	HOLLAND	ОН	43528	928-204-2002
12	40172024	YOUNG EMILY J	304 ACACIA DR	SEDONA	AZ	86336	55 SEDONA VIEW DR	SEDONA	AZ	86336	Tammie Quinlan 928-862-2028 (possible tenant??)
6	40133010	HAYES RUTH F TRUST	98 W MALLARD DR	SEDONA	AZ	86336	4421 HIGHLAND DR	CARLSBAD	CA	92008	760-434-9806
28	40133009A	LANG PATRICIA	35 BELL ROCK TRL	SEDONA	AZ	86336	303 FOX RUN DR	VENETIA	PA	15367	412-580-5886
5	40133011	CHRISTMAS MICHAEL A &BRENDA HAYES CPWROS	96 W MALLARD DR	SEDONA	AZ	86336	PO BOX 130475	CARLSBAD	CA	92013	760-510-1995
4	40133012	BOVEE LIVING TRUST	94 W MALLARD DR	SEDONA	AZ	86336	2916 E COBRE DR	PHOENIX	AZ	85028	602-980-1585 - Russell & Bernadette Bovee
3	40133013	HUELAT BC & TR RVCBL TRUST DTD 10/30/00	92 W MALLARD DR	SEDONA	AZ	86336	92 W MALLARD DR	SEDONA	AZ	86336	620-231-4313
2	40133014	SHAW JENNIFER	90 W MALLARD DR	SEDONA	AZ	86336	PO BOX 20944	SEDONA	AZ	86341	415-902-2998
24	40133015	GENOA LLC	89 W MALLARD DR	SEDONA	AZ	86336	333 VIA LIDO SOUD	NEWPORT BEACH	CA	92663	949-723-0068
23	40133016	SLUDER A KATIE	91 W MALLARD DR	SEDONA	AZ	86336	95 COPPERMINE RD	CONCORD	MA	01742	Kenneth Ledeen 978-371-0223 (same mailing address)
22	40133017	PARKER ADRIAN & GEORGIANA	93 W MALLARD DR	SEDONA	AZ	86336	93 W MALLARD DR	SEDONA	AZ	86336	623-221-5259
21	40133018	BRACKIN LIVING TRUST DTD 4-14-15	95 W MALLARD DR	SEDONA	AZ	86336	95 W MALLARD DR	SEDONA	AZ	86336	928-284-2042
20	40133019	MCGOWAN MARK J	97 W MALLARD DR	SEDONA	AZ	86336	500 N LENZNER AVE APT C-14	SIERRA VISTA	AZ	85635	NO AWC ACCT
19	40133020	SMITH JOHN J & SHARON J	99 W MALLARD DR	SEDONA	AZ	86336	8621 HUNTERS TRACE LN	PLANO	TX	75024	NO AWC ACCT ***01/24/18 MAIL RETURNED ATTEMPTED NOT KNOWN**
34	40133021	MCGEARY VINCENT E	20 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	31 KINGSRIDGE	FRENCHTOWN	NJ	08825	908-328-5827
35	40133022	ENTRUST ADMINISTRATION FBO; HAMPTON DAVID IRA #28686	40 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	555 12TH ST STE 1250	OAKLAND	CA	94607	303-697-6020 (60 Cathedral Rock Trl-no acct for 40 Catherdral)
7	40172001	PETREE COURTYARD INC	100 E MALLARD DR	SEDONA	AZ	86336	343 PIONEER DRIVE STE 404	GLENDALE	CA	91203	City of Sedona only acct under this address 928-204-2234
8	40172002	VIGIL BILLY COSME JT ; VIGIL-LIGHT ATHENA D JT	102 E MALLARD DR	SEDONA	AZ	86336	2602 S TERRACE RD	TEMPE	AZ	85282	NO AWC ACCT
9	40172003	PRICE FAMILY TRUST DTD 9-11-13	104 E MALLARD DR	SEDONA	AZ	86336	20 FAWN SPUR	SEDONA	AZ	86336	NO AWC FOR 104 Mallard/Cust has acct 20 Fawn Spur 847-945-3199
17	40172019	SWIDLER STEVEN M	305 ACACIA DR	SEDONA	AZ	86336	1277 SWEETWOOD CIRCLE	AUBURN	AL	36830	334-502-0047
13	40173012	SCHUSTER TONY SIMON & JILL C	306 ACACIA DR	SEDONA	AZ	86336	13900 TAHITI WAY APT 309	MARINA DEL REY	CA	90292	928-274-8096
36	40133005	HRUSCHKA GILBERT J	70 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	70 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	714-534-5173
40	40133006A	BEHR INVESTMENT GROUP, LLC	86 CHIMNEY ROCK TRL	SEDONA	AZ	86336	PO BOX 1354	CHICAGO	IL	60690	979-530-6894 Herbert / Ann Weiner on AWC ACCT
39	40133007	O'BRIEN JOHN & JEANNE FAMILY TRUST; DTD 12-19-06	30 BELL ROCK TRL	SEDONA	AZ	86336	426 E MCLELLAN BLVD	PHOENIX	AZ	85012	602-277-6108
31	40133029G	PACE-CAMPBELL NANCY ANN	55 BELL ROCK TRL	SEDONA	AZ	86336	55 BELL ROCK TRAIL	SEDONA	AZ	86336	949-859-0730 Nancy / Bob Campbell name on AWC Acct
37	40133029H	DONNELLY DANIEL & CONSTANCE CPWROS	45 BELL ROCK TRL	SEDONA	AZ	86336	45 BELL ROCK TRL	SEDONA	AZ	86336	480-231-8131
33	40133029J	DONNELLY DANIEL & CONSTANCE CPWRS	49 BELL ROCK TRL	SEDONA	AZ	86336	45 BELL ROCK TRL	SEDONA	AZ		480-231-8131 NO AWC ACCT for this address, same cust as above
30	40133029N	TOWNSON JOSHUA J & WENDYLYNN	N/A	SEDONA	AZ	86336	4513 S COUNTY ROAD 1270	MIDLAND	TX	79706	no service address listed / NO AWC ACCT
32	40133029R	WINBORNE SANDRA G	N/A	SEDONA	AZ	86336	125 GRAY FOX DR	SEDONA	AZ	86351	no service address listed / NO AWC ACCT
38	40133029Z	ASH LOWELL	N/A	SEDONA	AZ	86336	4903 W 24TH AVE	KENNEWICK	WA	99338	no service address listed / NO AWC ACCT
1	N/A	USDA FOREST SERVICE	N/A	SEDONA	AZ	86336	1824 SOUTH THOMPSON ST	FLAGSTAFF	AZ		928-527-3600
25	408-14-033	SCHALLERT JAMES B & SHELLEY D TRUST	135 RED ROCK TRAIL	SEDONA	AZ	86336	62897 E TERRACE WIND DRIVE	TUCSON	AZ		520-818-3459
26	408-14-024B	KRIPES THEODORE R & JEANINE	140 CHIMNEY ROCK TRL	SEDONA	AZ	86336	23023 SE 448TH ST	ENUMCLAW	WA		Jorge Zafra name on AWC acct 928-239-1139 (tenant??)
27	408-14-023	WOODROFFE KARIN	90 CHIMNEY ROCK TRL	SEDONA	AZ	86336	35 WILLOW GROVE BLVD	SHARON	ON, CANADA		905-478-1351
	401-33-004A	BENSON BILL	20 CASTLE ROCK TRL	SEDONA	AZ	86336	206 WINDMERE CT	SEDONA	AZ	86336	928-204-2643
	401-33-001	DEBOE BART	115 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	PO BOX 322	HUNTINGTON BEACH	CA	92648	714-381-4222
	401-33-024	LASIA MARIA & PAWEL	55 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	PO BOX 20521	SEDONA	AZ		928-203-1703 CELL #928-592-7554
	401-33-001	HAMPTON DAVID V & CAROLE L	75 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	PO BOX 382	MORRISON	CO		NO AWC ACCT / OWNS 60 CATHEDRAL ROCK ALSO 303-697-6020
	401-33-023	HAMPTON DAVID V & CAROLE L	60 CATHEDRAL ROCK TRL	SEDONA	AZ	86336	PO BOX 382	MORRISON	CO		303-697-6020
	408-14-021	BEZILLA CHARLES / KASCHENBACH BRANDY	75 CHIMNEY ROCK TRL	SEDONA	AZ	86336	75 CHIMNEY ROCK TRL	SEDONA	AZ		410-929-1099 BRANDY C#410-585-7053
	408-14-022	PRESTWICK NANCY	80 CASTLE ROCK TRL	SEDONA	AZ	86336	PO BOX 1112	SEDONA	AZ		928-282-3059
	408-14-009A	MCBEE GARY & MORROW MONICA	25 CASTLE ROCK TRL	SEDONA	AZ	86336	10002 N 95TH DR APT A	PEORIA	AZ		NO AWC ACCT
	400-14-009A	IVICALE GART & IVIORNOW IVIONICA	25 CASILE RUCK IKL	SEDUNA	AL	80330	TOOOT IN ACTUAL DK WAT W	PEURIA	AL	80045	INO AVVC ACCI

^{**}SEE MAILING LABEL #5 - NAMES FROM LAST MEETING SIGN IN