MINUTES OF SPECIAL MEETING BOARD OF DIRECTORS FOUNTAIN HILLS SANITARY DISTRICT

The Board of Directors of the Fountain Hills Sanitary District and Town Council of the Town of Fountain Hills met in a **Joint Work/Study Session** on **Wednesday, October 9, 2019** at **5:30** p.m. in the Town Council Chambers located at 16705 E. Avenue of the Fountain Hills, AZ 85268.

Agenda Item No. 1 Call to Order and roll call.

The following Directors were present:

Chairman Greg Dudash, Vice Chairman Jerry Butler, Director Michael Maroon, and Director Robert Thomson. Director Thom Reski arrived at 6:15 p.m.

The following Town Council Members were present:

Mayor Ginny Dickey, Vice Mayor Sherry Lekrone, Councilmember Dennis Brown, Councilmember Alan Magazine, Councilmember Mike Scharnow, and Councilmember David Spelich. Councilmember Art Tolis was absent.

The following Executive Staff members from the Sanitary District were present: Dana Trompke, District Manager and Bill Sullivan, Legal Counsel.

The following Executive Staff members from the Town of Fountain Hills were present:
Grady Miller, Town Manager, Aaron D Arnson, Legal Counsel, and Elizabeth A. Burke,
Town Clerk.

Mayor Dickey welcomed the Board and congratulated the District on their 50th anniversary. She also thanked Dana and staff for the tour of the Advanced Water Treatment Facility during the 50th anniversary celebration.

Agenda Item No. 2

<u>Update on the Sanitary District's project to construct and install recharge well control rooms/restrooms at Fountain Park.</u>

The District Manager gave an update on the construction of the recharge well control buildings/restrooms at Fountain Park.

District Manager informed the Council and Board that at Well #2/East building, the outer shell is complete and they are working on the roofing. Next they will be putting in the interior

finishes, toilets in the restrooms, and equipping the well control room which will house the Districts control system, valves, flow meters, instrumentation, and control panels. Following that will be the additional landscaping improvements, including additional sidewalk to get into the facilities. Construction on this well is expected to last through December and the District continues to push the contractor to have that facility up and open with a clear certificate of occupancy by the second or third week of December.

Work at Well #4/North site will continue after completion of Well #2 and should be complete by the end of January.

Councilmember Brown thanked the District for constructing the restrooms and stated that "it is truly an addition to our Town and we appreciate it".

Town Manager stated that one of the most common complaints that they hear about the park is that it is a 60-acre park and there is only one restroom to service the entire park. These locations should work out very well and the Town really does appreciate working together on the project.

Mayor Dickey stated that they appreciated the communication and keeping Town staff informed.

Agenda Item No. 3

Discussion regarding the proposed replacement of the lake liner at Fountain Park.

Town Manager stated that this item is on the Agenda because there will need to be some participation on the part of the Sanitary District, not necessarily funding participation but having some input and feedback. The last liner was replaced shortly after the Town accepted the lake from MCO around early 2000 and is approaching its 20-year life warranty, and should probably have to be taken care of in three to five years. There will be challenges in disposing of the water. The Town will have to have some engineering help to identify what the dry-up period would be, coordinate with the District on not taking any water at a certain point, and then try to figure out how to have the lake water naturally dissipate and evaporate.

Chairman Dudash thanked the Town for hosting the joint meeting. He stated that this topic is going to be more challenging than Town Manager pointed out. The lake is 100 million gallons and the District doesn't have the capacity to receive and treat all of the water in a short amount of time. Vice Chairman Butler calculated it would take the District approximately a year to take a 100 million gallons in addition to what is normally done. There are four possible places to go to drain the lake. 1. Utilize the State Trust Land for evaporation after constructing a pipeline from the lake to the State Trust Land. 2. Drain into McDowell Mountain Park and again a pipeline would be needed. 3. Work with the adjoining Native American communities. 4. Run a pipe along Shea Blvd. to tap into the Scottdale's wastewater system if Scottsdale would agree to accept it.

Chairman Dudash also informed the Town that the District does also not have 100 million gallons of water to refill the lake and the Town may need to purchase water from Epcor. The District will work with any consultant the Town brings on board.

Councilmember Magazine asked Town Manager how they know it's going to be approximately five years. Town Manager stated that there is going to be some assessment done of the actual liner itself. Town Manager also stated that it is going to take some time to figure out the strategy and logistics.

Councilmember Spelich asked District Manager "is the District no longer in need of the lake for water storage". District Manager explained that the lake still has a vital use in the District's management of reclaimed water, but that its capacity needs are larger than the lake.

Director Maroon asked Town Manager what the catalyst would be to replace the liner? What was the catalyst in the past that necessitated the replacement? Town Manager stated that the liner has a 30-year life and we're now into almost into 2020 and we don't want to get into an issue where there is a leak.

Mayor Dickey asked how the lake was filled up in 2000. Community Services Director, Rachel Goodwin, stated that the lake began to be refilled on November 1, 2000 and didn't finish until February 1, 2001. The water did come from the Sanitary District.

Agenda Item No. 4

<u>Discussion regarding a joint project to develop the water storage system to irrigate</u> Fountain Park with water from advanced wastewater treatment plant.

The Town Manager stated when they had a workshop on water quality, one of the recommendations out of it was having a water storage system with water coming directly from the District's Advanced Water Treatment Facility that would allow the Town to basically have "cleaner water" that would allow irrigation with less salinity in the water. The logistics, where it would be located, and how much it will cost will need to be identified.

Agenda Item No. 5

<u>Discussion regarding Town notification of any proposed development projects with increased densities that might impact the Sanitary District in the delivery of sanitary sewer services.</u>

The District Manager stated that this item was placed on the Agenda to reiterate that the District be informed early in the process of new developments. Town Manager informed the Council and Board that in the past there were issues with developers not contacting the District early enough in the process. Town staff has been giving more of an effort to inform District staff of anytime they have met with a developer, that had a proposed project.

Agenda Item No. 6

<u>Discussion regarding the impact of water softeners on the sanitary sewer system and users of reclaimed water.</u>

District Manager stated that this subject was brought up at the last joint meeting and is being brought up again to keep it in everyone's awareness. The majority of people have water softeners because of the hard water supply. Every bag of salt that is poured into a water softener, gets dissolved, and ends up in the sewer system, which ends up in the reclaimed water, and ends up being delivered to the golf courses, Fountain Lake, Golden Eagle Park, and Desert Vista Park for irrigation water. The salinity in reclaimed water is double what it is in drinking water and that can be attributed to water softeners.

At some point in the future, the Sanitary District will start a public education campaign about the issue.

Councilmember Spelich stated that he had an idea that the Sanitary District and Town purchase in bulk potassium chloride, due to the fact that potassium chloride is very cost prohibitive. His idea also is if we could do a bulk purchase of potassium chloride, it would get the cost down more, so that residents would be more interested in switching over from sodium-based to potassium chloride.

Councilmember Brown informed the Council and Board that in the last eight years, he has not installed any water softeners in any of the new homes he has built. He has only installing filtration systems.

Miscellaneous

Councilmember Sharnow wanted to point out that as a Board member for the Fountain Hills Coalition, the Sanitary District has been cooperative with the Coalition and sector meetings and has been publicizing the Prescription Drug Drop Off Box at Town Hall to discourage prescription drugs being flushed and ending up in reclaimed water.

Chairman Dudash stated that when he and Director Reski ran for re-election two years ago, one of the issues was the need for more active involvement of the District with the Town. He stated he was very happy to see that the District is fulfilling the promise that they made. One of the things that has happened is the Town Manager and District Manager are working together on a regular basis.

The meeting adjourned at 6:32 p.m.

Fountain Hills Sanitary District

Penny Cook - Assistant Secretary

Page | 4

TOWN OF FOUNTAIN HILLS MINUTES OF THE JOINT MEETING OF THE FOUNTAIN HILLS TOWN COUNCIL AND THE FOUNTAIN HILLS SANITARY DISTRICT BOARD

OCTOBER 9, 2019

1. Call to Order and Introductions

Mayor Dickey called the Joint Meeting of October 9, 2019, to order at 5:31 p.m.

TOWN COUNCIL MEMBERS PRESENT: Mayor Ginny Dickey; Vice Mayor Sherry Leckrone; Councilmember Dennis Brown, Councilmember Alan Magazine, Councilmember Mike Scharnow, and Councilmember David Spelich.

TOWN COUNCIL MEMBERS ABSENT: Councilmember Art Tolis.

TOWN STAFF PRESENT: Town Manager Grady E. Miller; Town Attorney Aaron D. Arnson; and Town Clerk Elizabeth A. Burke.

FOUNTAIN HILLS SANITARY DISTRICT BOARD MEMBERS PRESENT: Chairman Gregg Dudash, Vice Chairman Jerry Butler, Board Member Bob Thomson, Board Member Tom Reski (arrived at 6:14 p.m.) and Board Member Michael Maroon.

FOUNTAIN HILLS SANITARY DISTRICT BOARD MEMBERS ABSENT: None

FOUNTAIN HILLS SANITARY DISTRICT STAFF PRESENT: District Manager Dana Trompke, P.E. and District Attorney William Sullivan.

Mayor Dickey congratulated the Board on their 50th year celebration. She noted that the Town will be celebrating 30 years of incorporation (2019) and 50 years of the fountain (2020).

2. Update on the Sanitary District's project to construct and install recharge well control rooms/restrooms at Fountain Park.

Ms. Trompke said that everyone has probably seen the construction fencing up at the park, which has been up since May. She said that the project entails facilities at two ASR recharge wells (2 and 4). They are progressing and Well 2 (eastern) will be the first to be done. The building shell is up, exterior and interior, and they are working on roofing. She said that they are pushing the contractor to get the Certificate of Occupancy by December. Well 4 will continue work through January.

Councilmember Magazine asked if the facilities would be locked at night. Ms. Trompke said that there is a separate door for the control room for which they have the key. The entrance to the restrooms will have a lockable gate, similar to the existing restroom facilities at the Park and the lock and key will be kept by the Parks Department.

Councilmember Brown thanked the District for doing these facilities; he said that it was truly an addition to the Town and they appreciated it.

Mr. Miller said that this is one of the most common complaints they hear--a 60-acre park and only one restroom. He said that it was a perfect win/win.

Mayor Dickey thanked the Chairman for keeping the staff informed. She said that they appreciated all of the signage and communication.

3. Discussion regarding the proposed replacement of the lake liner at Fountain Park.

Mr. Miller said that this is on the agenda because the District will have some input and feedback. He said that the lake is a reservoir. The last time they had the liner replaced was shortly after accepting it from MCO around 2,000 and it had a 30-year life. Given the temperature of the Valley here and the salinity of the water, they will probably have to replace it within the next 3-5 years.

He said that the last time they did it there was an evaporation bed where they could pipe a lot of the water. This time will be much more challenging as that will not be available. They will need to have engineering help them identify a location and coordinate with the District in not taking any water and figure out how to have it dissipate and evaporate. It was noted that the best time to do this would be in the summer when they are not having as much water go through the treatment plant.

Mr. Miller said that they will also be looking for funding. It is likely they would recommend identifying the needs for the next 30 years at Fountain Park as it relates to pumps, liner, electrical panels in the pump room, etc. He said that right now they are electrical and mechanical; they will probably go to solid state circuitry.

He said that a few years ago they had a work session on water quality and one of the things discussed was having a variable speed drive system to allow the pumps to go at various heights at various times so it takes less load and power. The sad thing is that when they did an analysis, it came back with a 20-year payback period. He said that did not factor in the wear and tear every time they start up and pumps are millions of dollars to replace.

He said that they wanted to bring this up because they will have to work closely together. He said that the Sanitary District provides the water and they will have to make sure they are not causing issues for the District. He said that they will bring in experts to work with the District and the Town.

Chairman Dudash thanked the Town for hosting the meeting. He said that this topic is going to be more challenging than that. The lake is 100 million gallons and they do not have the capacity to drain it. It would take them a year to drain. He said that they have to deal with wastewater within boundaries of the district which are the boundaries of the Town. They will need to go outside of the Town to locate areas that could be used for drainage. He said that they have looked at the State Trust Land,

McDowell Mountain Park. He said that there are two amazing Native American communities next to them and the Town has relationships with both of them. He said that they could run a pipe up Shea and drain it that way, but that would probably cost \$1/2 million to \$1 million.

He said that they do not have water to give the Town to refill the lake. Right now it is free. They are charging golf courses and they are running at a shortage. They will not be able to give them 100% of what is needed. They will need to work with Epcor and that will not be free, but they would be getting potable water and will not have the sodium problem. He said that the Town will probably need to go to a bond issue. The District will work with whatever consultant that is selected. He said that this will be a Town project, but they will work together, with one board member always involved in the meetings. He said that failure is not an option, but they want to be realistic and identify the factors, the costs, etc. and then go to the community.

Councilmember Magazine asked how they knew they have five years left. Mr. Miller said that they are going to do some assessment of the liner itself. It will take them some time to figure out the strategies and logistics. He said that this also ties in to the next item; they may want to tie them together. He said that they need to irrigate the park vegetation and grass. It all needs to be part of the same strategy.

He said that once they stop using the lake for irrigation then it will be a sealed system. They will take water periodically, but will probably have it chemically balanced so they do not get odor issues. Councilmember Magazine asked if anyone has discussed the smell.

Mr. Miller said that a few years ago the Town installed a new aeration system. His understanding is that in two days it puts water through a system that used to take seven to ten days. He said that they are circulating the water and have a lot more pressure, moving more water than before. He said that also during the major blooms of algae they use hydrogen peroxide to help and deodorize chemically.

Councilmember Spelich asked if they were saying that the District will no longer be using the lake for storage. Ms. Trompke said that the original design and function of the lake was intended to be a reclaimed water reservoir; it is a vital part of their system, but it is not as vital as it used to be. Now they have recharge wells where they can store water underground. The amount of reclaimed water produced exceeded the capacity of the lake by the late 1980's so by the time they got into the 1990's they got into a crunch. The capacity of the lake was smaller than what they needed as a whole, but it still plays a vital part. It can take up volume of water when the wells are down. They are very much a maintenance item. They go through times when the wells are down and it is helpful having that extra volume available.

Mr. Miller said that the golf courses are now getting direct ties from the District, where before they were getting it from the lake (up until 2000).

Councilmember Spelich said that it seems like the partnership goes to the level of paying. Mr. Miller said that they should keep in mind that through the Intergovernment Agreement with the District the Town is not paying a cent for water

and they irrigate the parks every night.

Community Services Director Rachael Goodwin said that they use an average of 400,000 gallons per night; in the summer when it is hot, about 600,000 gallons.

Chairman Dudash said that the District is going to work with the Town. They have great engineers trying to figure out the most economical and efficient way to get this done.

Member Maroon asked what the catalyst was the last time the Town replaced the liner. He asked if they wait until there is a leak. Mr. Miller said that his concern is that they do not want to have a leak. If they get a leak then they are talking about sink holes and related problems. A lot of what they have flows into Panorama Wash and goes to the reservation. They have had issues with it going over to the Tribe's golf course and there are impacts.

Mr. Miller said that it is not like when they build dams. The liner is keeping the water from seeping and going under the ground. They need to be good stewards and keep up on their maintenance. This is identified in the Town's capital facilities plan.

Ms. Goodwin said that in 2000 when they replaced the liner they started draining the lake in May and it was completed in November. It took until February to fill the lake back up. At the time the assessment was done the first time it was made of PVC quality and found to be failing in certain areas and they also found concrete cracks and leaks through the line. That is what kicked it off and they went into a 20-year warranty which will end at the end of next year.

Ms. Goodwin said that they are in a better than average situation. They had a site assessment done, but in order to actually test the liner they have to lower the lake level and cut a 5' x 5' section and they are not recommending that at this time. Mr. Miller said that it was similar to a skin graph. It would exacerbate the lining and would run around \$15,000. Ms. Goodwin said that when they replaced the liner in 2000 the quality they chose was very high and it still remains a very high-quality material. It is one step below what is used at nuclear power plants at their discharge.

Member Thomson said that one of the things done the last time was they put in an undersurface. The first time it was laid over the subbase. Ms. Goodwin said that was correct; there was compacting and a treatment.

Vice Chairman Butler said that under the liner in 2000 they put a geotextile fabric in place to keep the rocks from moving upward. If they could find the file there is a sample of both products in the file.

Ms. Goodwin said that they were looking through the process from back then. She said there is a lot of wildlife, fish, turtles. They want to figure out what impact it would have once they become a sealed system. That all has to be considered as well.

Chairman Dudash suggested that as far as timeframe goes, they should consider

between the two fairs, over the summer. Ms. Goodwin said that would be a great benchmark.

Ms. Trompke said that it is appropriate to do this in a forward thinking, proactive process. They do not want to wait until it is a matter of crisis. This could be a 5-7 year process to get the logistics and funding. She applauded the Town for taking it on early.

 Discussion regarding a joint project to develop the water storage system to irrigate Fountain Park with water from advanced wastewater treatment plant.

Mr. Miller said that this item ties to the previous topic. When they had the workshop on water quality, one of the recommendations was to have a water storage system that would allow them to store cleaner water. He said that this is essential once the lake is no longer having water come out for irrigation. They will need to identify the logistics of where it would be located and the related costs. He said that he has discussed with Ms. Trompke either locating it near the park or at the Advance Wastewater Treatment Plant (AWTP). In any case, it is something that is long overdue and something that will help ensure that they have thriving grass. The grass they have has a hard time because of the sodium and the stagnant water sitting there builds up the salinity.

He said that the Town has installed an irrigation system that helps remove saline out of the sprinkler heads, but they have also found that the water has not been able to go into the grass deeply. He is confident that even with the things done recently by the Parks Superintendent and the Community Services Director to help improve the quality, it is still not ideal. They want to have a better water quality go out to the vegetation.

Councilmember Scharnow asked if they were confident that the system would help with the grass because it has been decades with those conditions. Mr. Miller said that they have actually increased watering the last few years and have noticed that it has improved somewhat. Whenever they have a better quality of water they will have better vegetation. Board Member Thomson said that taking the water directly out of the ADWT and into a tank will increase its quality.

 Discussion regarding Town notification of any proposed development projects with increased densities that might impact the Sanitary District in the delivery of sanitary sewer services.

Ms. Trompke said that at the staff level they work hard to communicate what is going on in way of development within the Town. Mr. Miller said that they had a few hiccups when he first started with staff not always communicating to the Sanitary District. He said that they have communicated with the District recently about Keystone, and Daybreak, as well as another project too early to make public.

Ms. Trompke said that they do appreciate the advance notice. Their infrastructure is built out in much of the area, almost 50 years ago. When a parcel comes in and gets developed at higher densities, the infrastructure cannot handle it. With a gravity sewer system there is a set amount of capacity. If larger developments have impact they

want to make that known to the developer as to what their contribution would be.

Board member Reski arrived at this time (6:14 p.m.)

6. Discussion regarding the impact of water softeners on the sanitary sewer system and users of reclaimed water.

Mayor Dickey said that awhile ago she got information from the District for MAG staff as they were unaware of some concerns that they thought were only local or statewide, but are now found to be national. Ms. Trompke said that this was a subject brought up during the last joint session. She said that it is on the agenda now just to keep it in everyone's thoughts. They have not solved the problem yet. She said that the majority of people have water softeners because of the groundwater and CAP water. She said that every bag of salt ends up in the sewer system, which then ends up watering grass at parks and on golf courses. She said that there is a high salinity in the reclaimed water; double what it is in drinking water.

Ms. Trompke said that there are some parts of the country where there is so much impacting their water table that they have prohibited water softeners. They are not at that point of crisis, but the District would like to start more of a public education campaign. She said that there are a lot of things in the public education campaign. There is an alternative, potassium, which is more expensive, but there are people that have made that choice now as an environmental consumer. The bags of salt run around \$200 versus \$50. She said that there are other water cistern conditioners. The plumbers and water softener suppliers are starting to catch up, not just recycling, but it has to be about salt going into the wastewater.

Councilmember Spelich when they had their one-on-one, he had no idea about the salt and how it affects the water table and lake. He had an idea which he had discussed with the District and the Town, about the possibility of buying in bulk to get the cost down so customers may be more inclined to switch over. There are other issues to be considered such as what it would be stored and the logistics of getting it delivered, but he would be interested in furthering discussions on that idea. He said that it was alarming at the Leadership Academy where they did a presentation on salt and its effects. He thinks it is a problem they should try to solve.

Ms. Trompke said that she would be glad to set up a meeting with Mr. Miller. It would be a great discussion to get into the weeds of, with it being a joint issue. Mr. Miller said that nowadays there are energy-certified appliances, etc.; perhaps they would qualify for a rebate. Or, perhaps there are higher efficiency water softeners that use less salt.

Ms. Trompke said that she could not speak to how efficient a water softener is, but she does know that when she looked on the website for a company to come out, there is at least a tab for a salt-free base system. In that environmental line of recycling, etc. she thinks the industry will start to develop more cost-effective and efficient systems.

Councilmember Magazine said that he thinks this is a good one to work on. He had

no knowledge of this until their last joint meeting. He knew it was a problem, but there had never been any discussion. They need a major education process; it needs to be put in front of people.

Councilmember Brown said that over the past eight years they have seen more and more filtration systems versus softening systems. He has not installed a softener in the past 8-10 years. They are going to put infiltration systems that have different chemicals. He would recommend that if someone has to replace a salt system, they should replace it with a filtration system. That would be a start for the Town.

He said that when they first started having their meetings, it was his understanding that the lake was mandatory for the District as overflow. He asked if they could shut off the lake and still be in compliance. Ms. Trompke said that it was not a legal requirement, but it does have an operational purpose. She said that they do not have any discharges. Every drop has to be converted to high-quality recycled water and reused. They have no option to send it elsewhere. In a typical year they will get 650 million gallons of wastewater and about 500 million gallons have to find a place for disposal. The golf courses use every drop as well as the Town parks and lake. It is consumed by evaporation through the lake and the fountain.

She said that the lake also serves as an emergency storage. When they get snow in February and no one takes a drop of water, at some point they need to have a place to store it.

Councilmember Brown said that the lake is much prettier when it is completely full, and he asked if there was a way to have it higher. Ms. Trompke said that they need volume set-aside for a volume event.

Councilmember Scharnow said that as a board member for the Coalition, the District has been very cooperative with their efforts. He appreciates the extra effort the District gives in advertising for the Coalition.

Chairman Dudash said that two years ago he and Board Member Reski ran for reelection with a commitment for a more active involvement with the Town. He was happy to see that they are filling that promise. One of the things that has happened is Mr. Miller and Ms. Trompke meeting every other month and having those discussions which did not happen before. The goal is to solve problems mutually.

Mayor Dickey thanked the Chairman and board members. She said that at their last Council meeting they had the state legislators attend, and at that time she mentioned that they all have the same constituents. The same holds true between the Town and the District and the citizens expect them to work together. She appreciated everyone coming to the meeting.

7. Adjournment

MOVED BY Councilmember Alan Magazine, **SECONDED BY** Councilmember David Spelich to adjourn the meeting.

Vote: 7 - 0 Passed - Unanimously

The Joint Meeting of the Fountain Hills Town Council and Fountain Hills Sanitary District Board held October 9, 2019, adjourned at 6:32 p.m.

	TOWN OF FOUNTAIN HILLS
	Ginny Dickey, Mayor
ATTEST AND PREPARED BY:	
Elizabeth A. Burke, Town Clerk	-