

MINUTES
ENOCH CITY WATER BOARD
May 14, 2020 at 4:30pm
City Council Chambers
City Offices, 900 E. Midvalley Road

MEMBERS PRESENT: On Zoom: Larry Gardner, Doug Grimshaw and Spencer Jones. Alan Miller and Steve Woolsey were absent.

STAFF PRESENT: Rob Dotson, Julie Watson, Earl Gibson and Council Member Harris

PUBLIC PRESENT: Val Kofoed, P.E. and Mike Jessop, P.G.p of Willowstick

1. **CALL TO ORDER OF REGULAR MEETING-**By Chairman Gardner at 4:35 pm on Zoom.
 - a. **Pledge of Allegiance** –Not given
 - b. **Invocation**-Not given
 - c. **Approval of agenda for May 14, 2020**–Chairman Gardner made a motion to approve the agenda. Motion was seconded by Doug Grimshaw and all voted in favor.
 - d. **Approval of minutes for February, 13, 2020**-Doug Grimshaw made a motion to approve the minutes. Motion was seconded by Chairman Gardner and all voted in favor.
 - e. **Conflict of Interest**-Spencer Jones stated a conflict on item 3. No others.

2. **PRESENTATION FROM WILLOWSTICK**

City Manager Dotson introduced Val Kofoed and Mike Jessop of Willowstick. Their company uses passive seismic technology to look for water. He cited other companies who do that type of work to find potential sources of water. In a conversation with one company we have worked with in the past, it was proposed Enoch City contact Willowstick. They have a method to use information from various technologies creating a way to use the information to take action. Val took the screen to show the presentation. Val said the company started in 2005 and have worked on every continent all over the world except Antarctica. They have worked for the most sophisticated firms in the world to better understand groundwater conditions to locate water sources. They are not the inventors of the techniques but are the developers of it. He showed slides and told about what their processes do in great detail. Underground fractures are a major factor in finding water. In a sense, they are like radiologists looking into the ground instead of doctors looking into the body. They characterize the groundwater. They have patents on some of their technologies. It is critical to get the well in the right place to optimize the water. This is to track water not to find it. He used the example of a dam with a leak. Rather than draining the whole reservoir they find the seepage so the repair can be done. He showed one of the instruments they use and explained it. They can measure electrical flow patterns in the ground where water would be because earth does not conduct electricity but water does. That is called the "AquaTrack" method. He gave many more details about the relationship of using electrical resistivity tracking methods and their various other methods such as radiometric, gamma and noting the "AquaTrack" is the best tool for finding and pinpointing where to drill for water in fracture zones. They gave several examples of successful projects in our region of the country including Idaho and Arizona projects. One successful study in AZ cost less the \$50,000 and

produced impressive results. That is what Willowstick does and how they can help us. They asked for questions.

Chairman Gardner asked if their methods work on flat ground with no mountains and no obvious water sources. Val confirmed they have had experiences with that in different situations worldwide in every geological setting. Electrical current does not lie; it emits a field. They have the tools to work on any type of ground and have done so all over the world.

Chairman Gardner asked City Manager Dotson what Enoch wants from the Water Board on this. There was more brief discussion of others we have worked with on finding water sources. He noted Mark Burr, who helped us with the Ravine well, suggested we contact Willowstick. We have an idea of places that may be productive but we may be missing some other opportunities. We could ask the City Council for some funding to start on this. The Water Board represents the experts if they would like to make a recommendation. They could make a recommendation by motion or they could recommend that Council Member Harris take it to the City Council. The motion may be to get a proposal from Willowstick to search certain areas where we have wells or to look at all of Enoch. Chairman Gardner said the technology sounds like it has had good success. Council Member Harris asked what we would do with the data if water was found on private land. City Manager Dotson said he is not sure we could keep it private. Any funding from Enoch makes it public information. He would like to look at mapping the whole City and BLM land around the City within a cost effective distance from Enoch. We wouldn't want to have to run pipe from a great distance away so there is no point in checking really far out. Perhaps within a two mile radius where we know there are faults now would be good. We should also check around existing well areas. We need to acquire new and better sources and this is a good opportunity. Who owns the data when the study is over will be another matter to investigate perhaps with our legal counsel. We should do all we can to discover using documented evidence. Council Member Harris said he would love to have the data and utilize it. We would have to weigh what we find. Council Member Harris said even if it is public information it benefits everyone. Doug Grimshaw said in one meeting we talked about Ravine wash for a main water source. He said we are getting too many straws in that one hole. It would be advantageous to see if there are other sources than just that one. Chairman Gardner said we could recommend getting a proposal to see if we can get a quote to map certain areas. Then the City Council could decide if they want to expand on that. Val said the techniques they use are dynamic. They can show the results the next day after doing the work and then model it in detail if it is promising. Val recommended they get together to look at areas to prioritize. This can be done in a phased approach; small bites at a time. Spencer Jones said it sounds amazing. City Manager Dotson asked his opinion and Spencer said our basin is made up more of channels like lava tubes. The key is to find the places the channels all line up. That is where sometimes a few feet can make all the difference in the world on hitting water or not. We need high production wells so the goal should be to line up all the channels. We need scientific facts rather than punching a bunch of holes randomly. City Manager Dotson asked Chairman Gardner what he wants to do. He suggested we make a recommendation to the City Council and that we spend a little money to explore this. If the results look good then we can expand it to the point that we drill a really good well. City Manager Dotson asked the Water Board to make a motion.

Chairman Gardner made a motion saying the Water Board concludes that Willowstick appears to have a good techniques and he proposes the City Council approve some funding for a study.

Doug Grimshaw amended the motion to say the Water Board recommends directing City Manager Dotson to confer with Willowstick to look at some options and costs for a study. The other Water Board members agreed they liked Doug's motion. Spencer Jones seconded Doug Grimshaw's motion and all voted in favor.

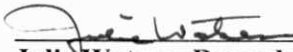
3. DISCUSS WATER WELL LEASE

City Manager Dotson said the City has been presented with an offer to lease a well from the owner. The owner wanted to lease it for a couple of years to see what the capacity is with more testing and we would like to work with the landowner. It could be a great well and could be one Willowstick could get involved with. Earl will meet with the owner to look at how to tie into it. We have the pipe. We would need to do some water rights adjustments to make it work. Right now it pumps about 300 GPM. We are limited by the pipe size as far as capacity goes right now. If it proves up to be a good source we could drill it out to a larger size later. This is to test it to see what it can produce. No action was taken.

4. PUBLIC COMMENTS-none

5. BOARD/STAFF REPORTS-none

6. ADJOURN-Motion to adjourn by Chairman Gardner. Motion was seconded by Doug Grimshaw and all voted in favor. The meeting ended at 5:50 pm.

 5-14-20
Julie Watson, Recorder Date