

1 **MINUTES OF THE SPRINGVILLE CITY WATER BOARD**

2
3 Tuesday, January 9, 2018
4 6:30 a.m.
5 110 South Main Street
6 Springville, Utah 84663
7

8
9 **ATTENDANCE**

10
11 Councilmember Secretary
12 Richard Child Marcie Clark
13
14 Board Members City Staff
15 Alton Beck Brad Stapley
16 Nile Hatch Shawn Barker
17 Calvin Crandall Juan Garrido
18 Rollin Hotchkiss - excused
19 Rod Andrew
20 Bryan Boshell
21 John Clemons
22 Visitor:
23 Erik Johnson, Nestle, Inc.
24

25 Mr. Beck welcomed the new mayor (Rick Child) and Erik Johnson, Industrial Services Manager with Nestle. Mr.
26 Johnson briefly explained his background as a mechanical engineer and his service in the Navy before going to work
27 for Nestle.
28

29 Mr. Clemons made a motion to approve the minutes for the November 14, 2017 meeting. Mr. Crandall seconded.
30 All were in favor.
31

32 Mr. Stapley asked Mr. Barker to give an update on the 400 South Well #2. They are down to 513 feet. Mr. Stapley
33 passed around a bag of soil that came out of the well. Mr. Barker believes there is water before 513 feet. We're still
34 seeing some clays and cemented material. Mr. Stapley believes the underground strata is going down. The static
35 level is about 68 feet below the surface. Well #2 is mirroring Well #1 at lower depths. Because the stratas are
36 different than Well #1, meaning we didn't get into exactly the same conditions as the well that is 300-400 feet away,
37 and it looks like everything is going down, we've gone deeper to try a new surface area on the casing that we'll be
38 putting in the screens so we get the same amount of draw down, or close to it. Mr. Stapley explained how draw down
39 works. We're trying to minimize our long-term pumping costs by getting the same amount of surface area of water
40 producing aquifer. We plan to go down to about 570 feet, as long we stay in this gravel type material, and then we'll
41 stop because then we'll match what the surface area of the adjacent well is. The draw-down of Well #1 is about 4
42 feet.
43

44 Mr. Barker reported that the spring flows are dropping off considerably. The only one producing really well is Upper
45 Spring Creek, around 1600 gpm. It usually averages 1100 or 1200 gpm. Mr. Crandall stated that Hobble Creek has
46 12" of snow right now; last year there was 50-60".
47

48 Mr. Stapley displayed a Power Point presentation on Providing Water to Future Hobble Creek Canyon Residents,
49 which was shown to City Council a few years ago. He would like to show it again to the new City Council. Mr.
50 Stapley explained what work is being done with adjudication in the canyon. The canyon users are using around 25
51 million gallons a year. Mr. Barker stated that it has dropped quite a bit since one of the heavy users moved. The use
52 in Kelly's Grove dropped also because three leaks were found and repaired. The plan only provides for 200 ERU's
53 and there are currently 157 in service. There are still vacant lots in Hobble Creek Haven and Holiday Hills. We're
54 getting close to what the 40-year plan says we can be providing and still be whole within City limits. Mr. Stapley
55 would like the council to understand the 40-year plan as far as providing water to users in the canyon. The
56 presentation needs to be updated and presented again.

May 8, 2018
Approved

1 Wastewater Update – Juan Garrido gave an update on the variance letter that was submitted to the State. The State
2 has not responded to anybody yet. We requested the deadline for meeting nutrient limits (phosphorous – 1.0) be
3 pushed back to year 2022 – 2024. Everyone along the Wasatch front is facing this problem. Mr. Garrido and Mr.
4 Stapley are on the steering committee for Utah Lake and they will be selecting a science panel to do a study on the
5 lake. They will bring findings on nutrients in the lake. One of the options to treat the nutrients is Clearas Water
6 Recovery. Mr. Stapley and Mr. Garrido toured the South Davis Sewer District that is using this technology. It is
7 partly funded with grants from the State. The project will be around \$35 million. The best way to remove the
8 nutrients from the water is through algae. The algae also has a value when it is harvested; it can be turned into other
9 commodities. The South Davis Sewer District will treat about 4 million gallons a day, which is comparable to what
10 Springville does. The algae will sell for about \$0.70/pound, up to \$2.50/pound. That plant is scheduled to produce
11 about 8,000 pounds per day. That will bring a considerable amount of money to offset the costs. Algae is the bio
12 product that will be used to make plastics, instead of oil being used. Processing oil for plastics is much more
13 expensive than algae. Mr. Stapley explained how this technology could get the plastic industry away from using
14 petroleum. We would have to upgrade our plant and build greenhouses.

15
16 We have 4 options to consider:

- 17 1. Clearas
- 18 2. REI – a similar type of technology (treating effluent and solids)
- 19 3. Chemical
- 20 4. Join with Provo on a brand new plant by the Provo Airport

21
22 Mr. Stapley explained that the Utah Lake Steering Committee will be studying the lake over the next three years and
23 will be making recommendations to the Department of Water Quality. Mr. Stapley is one of sixteen seats on the
24 committee. If we take out all the treatment plants, will it even make a difference on the lake? The public could
25 really have a voice in this decision. If the people find out their rate will go from \$26/month to \$80/month, they might
26 say they don't want a lake that is that clean. He wants to make sure that information gets out to the public.

27
28 Mr. Garrido stated that he would like to wait for some of this new technology to evolve and figure out where we will
29 get the biggest bang for our buck on investments to remove phosphorus. Chemical treatment is a short term solution,
30 which will get us to a 1.0. It will be a \$3million capital expense with a \$200-400,000 chemical use per year, but it
31 will double or triple our sludge production, and it might not be a good usable sludge to mix with our compost.

32
33 Mr. Stapley talked about the former director, Walt Baker who retired. Erica Gaddis was second in command and she
34 was really after the treatment plants. Now that she is in charge, she is listening. Mr. Stapley also mentioned an
35 outside national consultant who has been hired to do the mediating on this. He lives in Logan, but he does a lot of
36 work on the east coast and throughout the world. He interviewed every committee member on the panel.

37
38 Mr. Clemons talked about the plastic industry, in which he worked for 35 years. He saw other products used, such as
39 soybeans and algae, but nothing was viable other than oil. Mr. Garrido explained that this algae is higher quality and
40 involves a different process than what was done previously.

41
42 Mr. Stapley predicts that we are not going to be able to get below a 1.0. There are too many other factors going into
43 the lake. The chemical solution is “doable”. If we go with the Clearas option, it will cost \$25-35 million. He
44 doesn't see Springville being able to afford that. Mr. Garrido added that the EPA is doing this for water quality.

45
46 Mr. Clemons asked if someone looks at storm drains every day. Mr. Garrido stated that we try to, but we rely on the
47 residents to report violations to the City. Part of Mr. Garrido's job is to educate citizens and businesses on proper
48 disposal.

49
50 Mr. Boshell recommended Springville keep the sewer plant in Springville, and not join with Provo. Mr. Stapley
51 stated that Provo's plant is just as old as ours and he's not sure joining with them is the best option. The options will
52 be presented to city council and they will decide what happens.

53
54 Mr. Garrido explained a few things that would have to happen to our plant, if we decided to go with the Clearas
55 technology. We would need to add a carbon source to have the algae work. They are conducting tests to eliminate
56 everything past the trickle filters and air rotors and put the water right after the primary clarifiers (after we remove
57 the solids) and then the carbon source is already there. If that works, it might be feasible to go with a brand new

1 plant because we would be cutting so much power usage and maintenance. At that point we might even consider
2 relocating the plant further west and build it a little higher by our two biggest lifting stations and have everything
3 gravity from there.
4

5 Mr. Garrido mentioned that he also plans on spending \$150-200,000 in the next four or five years to rehab our
6 infrastructure in the sewer collection system, to try and limit infiltration. We also need to upgrade the power at the
7 plant, with a new transformer and new feed to backup power.
8

9 Mr. Andrew asked about pressurized irrigation updates. Mr. Stapley explained that the 1,000 homes that connected
10 to PI with the initial push have helped a lot. And, if we can get 4,000 gpm out of this new well, we might not have to
11 drill another well. Mr. Barker mentioned a bigger question to consider might be “how far do we want to expand the
12 secondary system”. Part of the initial master plan was to extend it east to 800 East (Swenson Dam area). Mr. Stapley
13 stated that we are looking at the overall master plan for roads and finishing up an RSL Study (road service life),
14 which affects infrastructure.
15

16 Mr. Stapley stated that we’re not making the Plat A Irrigation system bigger. We are tracking expenses and
17 continually raising rates every year, so the City isn’t subsidizing it so much. Mr. Stapley is not willing to get rid of it
18 yet because there are other benefits to it.
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20 Mr. Crandall moved to adjourn. Mr. Boshell seconded. All were in favor.
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22 *Adjourn* – This meeting adjourned at 7:32 a.m.
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