

BEATTY WATER AND SANITATION DISTRICT REGULAR MEETING MINUTES

JANUARY 26, 2022

Amina Anderson – Board Chair Albert Verrilli – Vice-Chair Jeannie Ybarra – Secretary/Treasurer Susie Henderson – Member Frank Jarvis – Member

ITEM#

SUBJECT

1. CALL TO ORDER -

10:03 am. Frank Jarvis absent. Marty Ugalde and Dean Day as public attendees.

- 2. GENERAL PUBLIC COMMENT Three-minute time limit per person for matters both on and off the agenda. No action will be taken by the Board.

 None.
- 3. FOR POSSIBLE ACTION Approval of the agenda for Beatty Water and Sanitation District Meeting January 26, 2022.

 Motion to approve the agenda by Jeannie Ybarra, 2nd by Albert Verrilli. 4 yeas
- 4. FOR POSSIBLE ACTION Discussion, Deliberation and Review with possible decision on approval of the PER (Professional Engineering Report) from Marty Ugalde with Day Engineering and all matters pertaining thereto.

Marty did alert NDEP that the board will be reviewing before submitting PER.

Water rights — Oasis (basin 228) is 933 acre-ft annually, Amargosa desert (basin 230) is 728 acre-ft annually, and Sarcobatus flats (basin 146) permitted 500 acre-ft annually. All rights are quasi-municipal and certificated which basically means they are protected except for permits 66120 and 66121 (EW-4) and permit 83057 (Sarcobatus flats). Middle well has no water rights. Total water rights for Beatty are 2, 161.235 acre-ft annually. Marty takes a quick minute to thank everyone who has contributed to the PER, Teresa, Jeannie, Amina and Rob.

Number of active customers is 477 and inactive customers is 43. Could be a little different. Based on this Marty took 3 years of water usage 2017-2019 and averaged 601 gpd/customer or 200 gpm. 1,180 gpd/customer (391 gpm) which makes max day usage at 1.96 times the average day usage. NAC recommends using 700 gpd/customer. The max

day factor of 2 times the average day usage is common. The annual average usage is 300 ac-ft and Beatty has 2,161 ac-ft and puts into perspective of how much water we still have. Room usage is a big factor in usage.

Water loss is at 5.46%, this number came before the leak at HWY 95 was fixed. The acceptable per AWWA is 2-3%.

3 Wells in the North. Summit, Indian Springs and Middle Well, which is offline right now. Roughly getting 185 gpm. Rehabbed by Carson Pump around 3-4 years ago. These wells have been declining over the years. We need all wells for blending. None meet the drinking water requirements one way or another. One Well in the South which is EW-4 and is pumping at 430 gpm. Is being treated for arsenic, but not for fluoride. Looked into treatment possibilities for Well 2 & 3 and the two options were Reverse Osmosis or Activated Alumina which are both successful in removing fluoride. RO though wastes a lot of water and we have nowhere to put that water. For lack of a better term, it is essentially toxic water, can we capture and reuse? No, we cannot. Activated alumina once exhausted you have to remove and replace which is around 12-14 months. Both methods are costly, RO at \$75,000/yr. and AA at \$82,000/yr. It's expensive and complex and doesn't seem feasible for the town of Beatty. Need a Treatment 2 license as well. Well 1 is inactive at this time and only pumps 25 gpm. Middle Well will need treatment for manganese (Mn). Did have it before and they used potassium permanganate. If you do not pay attention to it, you can get a bleed through causing pinkish water. Manganese isn't an eminent health risk; it is a secondary contaminant which stains your laundry and stuff like that. To treat it, green sand and potassium permanganate which is a tried-andtrue process. Middle Wells pumps 100 gpm but would exacerbate decline in water levels in north wells. Hydrogeologist recommended exploratory drilling in Fluorspar Canyon approximately 1½ miles south of town. Carbonate aquifer to yield potentially higher than north wells but may have water quality issues. EW-4 reportedly capable of higher yield but must perform testing to identify accurately because increasing pumping rate affects treatment filter vessels. Put Well 3 online for about a week or so and pump as much as you can at EW-4. Additional source of supply for growth is needed. NAC 445A, if source water provided by wells, must meet average day demand and fire with largest well out of

service. Based on that criteria, north wells can meet average day demand with EW-4 out of service but no additional demands including inactive services.

Still have 4 inch & 6 inch ACP pipe. There is a lot of dead-end mains. Updated the plans made by Farrwest. The areas by Lisle, Revert, the water pressures are low as well as below South and Middle Tanks. Can increase water pressures significantly if you close certain valves and improve fire flows. Need to make sure that we are blending adequately. Don't want to take too much water from Indian Springs tank. Two hydrants at NW side of town do not reach minimum residential fire flow which is 1000 gpm due to dead-end 4-inch mains. Both ends of towns do not meet 1500 gpm fire flows due to ends of long 6-inch water mains. Overall, the system is good for fire flows other than the certain areas with dead ends. Need to install 25 new fire hydrants. Marty goes into talking about the purple pipe system if you were looking into tying into Well 3 for non-potable water that would be separate from the drinking water system.

Total storage is at 760,000 gallons. South and Middle Tanks at 250,000 and Indian Springs Tank at 260,000 gallons. Storage is short by 311, 440 gallons. When you use the criteria that is used for sizing, there are 3 components: operational storage (day-to day), fire storage (highest fire flow), and emergency storage (75% of day-to-day). Storage is short by about 311,000 gallons based on fire flow requirement by Fire Marshal for Stagecoach Hotel (2,375 gpm). If the 43 inactive customers were activated, would be short approximately 357,000 gallons. If planning to put in a new tank, should consider additional volume for growth so a 500,000-gallon tank would be more appropriate. Location for a new tank would be best adjacent to the Middle Tank. If EW-4 is increased, then Indian Springs Tank could be another place to look at for another tank. The dive report was done March 2021 and the Booster Tank was the worst and the Indian Springs Tank was bad. Talked with RDC (Sparks, NV) they can rehab coating on bolted steel tanks. (SRF does not fund exterior coating rehab.) EW-4 booster station is recommended for replacement to the significant amount of rusting and corrosion. Also recommend to replace to increase size from 10,000 gallons to possibly 25,000? Not sure as to why this newer tank is corroding downstream and having issues.

Last thing they are required to look at besides projects is finances. Can fund O&M with water user revenue but can't fund total depreciation but some. Marty believed we were

debt free but was informed we have 2 USDA loans. He will be updating that portion. He was also informed of the LGIP (Local Government Investment Pool) accounts and how much is put into them monthly. To fund depreciation and O&M would need to be \$30.64/customer per month. Based on the average water usage the total water rate would be \$39.04 making it approximately a \$12.26 increase. the recommended water use rate is based on 1.5% of the MHI (Medium Household Income) which makes it approximately \$27.76. Last year the water rate increase was 2017. Funding agencies to look at the rate you should be at. Right now, would be about a \$5.00 increase.

Recommended projects are based off costs and other factors that are not voluntary costs such as complexity, O&M costs, effectiveness, efficiency, and such. Ideas that should be considered are:

- Recoat of Indian Springs Tank
- Test pump EW-4
- Replace water storage tank at EW-4 Booster Station
- Replace water mains
- Drill Exploratory Well in Fluorspar Canyon

Number one thing that should be done is the Indian Springs Tank. If you can save the tank and recoat it, it can several more years to it. Replacement costs would be much more than \$300,000. In the report those are just planning numbers. Need the input from Beatty Water for prioritization. Board liked the list that Mary had (above). They like the conversation and planning but would like to see some of these things already come into action. Marty says the first two bullets is what he plans for this fiscal year or just do water mains this year. Jeannie mentions that when the mines start becoming long term then we should probably see if we can increase EW-4. Marty believes we are already on the priority list for water mains but need to get some of this other stuff on before March with SRF. Mentions we have to match funds as the years go by for these projects.

Discussion about getting the pre-applications going (Amina), getting with NDEP for using Well 3 when testing (Marty), water rates (Lance), and refinancing loans (Teresa). Amina mentions about permits being renewed and Marty said they do and can take care of those. Board will email Day Engineering with any changes or comments need made on the report. Marty would like to get the report submitted to NDEP after the comment

changes and priority list. Nancy is taking care of the environmental report part of it. Shippo is involved when structures are 50+ years old. Marty mentions that in the report he does mention Turner Ranch and the subdivisions but doesn't know the aspects of it all. He also mentions that in the past 23 years the population of Beatty has gone down. Jeannie Ybarra pending the adjustments Marty wants to make for the financial aspect of it and the comments Amina needs addressed motions to submit and move forward with the PER to SRF, 2nd by Albert Verrilli. 4 yeas

5. <u>BOARD MEMBER REPORTS/COMMENTS – General information and updates</u> from board members. Announcements or topics / issues proposed for future workshops and agendas. No action will be taken by the Board.

Albert Verrilli makes a comment about there is more mining going on closer to Bear Mountain. There is gold steaks further down the mountain. Possibly Coeur.

6. GENERAL PUBLIC COMMENT – Three-minute time limit per person for matters both on and off the agenda. No action will be taken by the Board.

None.

7. ADJOURNMENT –

Motion to adjourn meeting at 12:09 pm by Jeannie Ybarra, 2nd by Susie Henderson. 4 yeas

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Signature Approval of the Minutes	
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