

TIMPANOGOS SPECIAL SERVICE DISTRICT  
ADMINISTRATIVE BOARD MEETING MINUTES

APPROVED

September 21, 2017                      6:00 p.m.                      Conference Room

Board Members

Present:                      Mark Johnson                      David Bunker                      Mark Christensen  
   Brian Braithwaite                      Lynn Walker                      Craig White  
   Tracy Wallace                      Sullivan Love                      Chandler Goodwin  
   Dale Ihrke                      Mack Straw

Excused:                      Commissioner Bill Lee                      Chris Condie

District Staff:                      Jon Adams, District Manager,  
   David Barlow, District Engineer  
   Danette Smith, Board Secretary  
   Joe Martin, CPA

Others:                      Craig Carlile, Ray Quinney and Nebeker  
   Brandon Wyatt, Bowen Collins & Associates  
   Brandon Heidelberger, Brown & Caldwell  
   Simon Watson, Brown & Caldwell  
   Ricardo Campos, Brown & Caldwell

**Call to Order**

Mark Johnson, Board Chair, called the meeting to order. 6:00 p.m.

**Public Comment**

There was no public comment.

**Approval of Minutes**

**1. Approval of the August 17, 2017 Administrative Board Meeting Minutes**

**Brian Braithwaite made a motion to approve the minutes from the August 17, 2017 Administrative Board Meeting. David Bunker seconded the motion. Those voting "Aye" – Mark Johnson, David Bunker, Mack Straw, Mark Christensen, Brian Braithwaite, Lynn Walker, Craig White, Tracy Wallace, Sullivan Love, Dale Ihrke and Chandler Goodwin. The motion passed with a unanimous vote.**

**Consent Calendar**

There were no items on the consent calendar.

**Financial Report**

Joe Martin presented the financials to the Board. Joe said we are 67% through the year. We have not paid on the settlement; it is still out there as something we owe, and should be cleared out shortly. As usual, because of our conservative budget, a lot of the accounts are lower than the 67%, except for a couple of categories, like impact fees, where we ahead of schedule. When we go through the budget we will change the forecast for these budget accounts and reevaluate based on the new impact fee rates, and what the estimate will be for the remainder of the year. Joe said the District is in good financial shape.

Brian Braithwaite said the UV Supplies account shows we have not spent anything this year. Jon said typically we will order replacement lamps, ballasts towards the end of the year, and they are sizable orders. We also have a

1 situation with overheating of the cabling. The installation was approved by the manufacturer's representative when  
2 the project was done, but we had some issues with it. They sent another representative who said it had not been  
3 installed correctly. We are trying to work through them to see what they will do for us. That money will either go  
4 for ballasts and lamps or the cabling. Brian said under maintenance spare parts, there is very little used. Jon said the  
5 flooding from the previous year hit that line item heavy; we are running lighter this year and will probably make an  
6 adjustment during the budget process.

7 Joe said the impact fee report shows it is running very well. We have collected all of July's revenues in August  
8 and already received August revenues from at least half the cities in September.

## 9 10 **Action Item**

### 11 **1. Approval to purchase (8) new Composting Covers**

12 Jon said there are two major composting cover manufacturers. We have bid out for eight covers the last two  
13 years; this will be the final year for the last eight covers. Originally Gore furnished the covers and we had some  
14 warranty issues; Gore did stand behind the warranty. MOR Inc. has been the successful bidder the last two years.  
15 This time as we bid it out, both manufacturers responded and Gore was the lowest bid. The delivery time is  
16 important to us. Previously, when we were dealing with Gore, the covers would come from outside the country and  
17 we had some problems getting them here, so we made delivery time part of the criteria too. Now Gore's  
18 representative is Sustainable Generation, located in Delaware and their delivery time has been cut down. Sustainable  
19 Generation (Gore) came in about \$40 thousand less than MOR. Jon said the warranties are pretty similar, but the  
20 Gore price is better and the delivery time is better.

21 Jon said if the board approves to purchase from Sustainable Generation, we will contact them and there will be a  
22 penalty attached if they are not here within the ten weeks after they receive the order. Brian asked what we expect  
23 the penalty to be. Jon said it would either be in the form of a discount or sometimes they offer another cover. We  
24 will look at it. Our main objective is to get them in this budget year. In the past, we have looked at a monetary  
25 penalty and have also accepted an additional cover. Brian said his reason for asking is it puts us in a bind if they do  
26 not deliver on time. Jon said at this point, we recommend going with Gore. We have experience with both covers  
27 and there are pros and cons with both. MOR's covers sit on the piles a little better, Gore is the Goretex fabric, and  
28 their skirt is a silicone rim which does not freeze to the ground in the cold weather, which is better for our operators.  
29 Mark Johnson asked if this will be the last time we will buy composting covers. Jon said we are planning this to be  
30 the last time we buy the covers unless the consultants recommend we compost somewhere else. Both vendors have  
31 some payment conditions and because of the nature of this it is not untypical to want half down at the time of order  
32 and then once received you pay the other half. Brian asked if it should be in the motion that we only pay for half up  
33 front. Jon said Sustainable Generation's payment terms state 50% due upon order and 50% due upon delivery and  
34 put we would accept those payment terms.

35  
36 **Brian Braithwaite made a motion to approve the order and purchase of eight new Gore Composting**  
37 **Covers from Sustainable Generation for a total amount not to exceed \$516,000.00 and also accept the payment**  
38 **delivery terms as identified. Dale Ihrke seconded the motion. Those voting "Aye" – Mark Johnson, David**  
39 **Bunker, Mack Straw, Mark Christensen, Brian Braithwaite, Lynn Walker, Craig White, Tracy Wallace,**  
40 **Sullivan Love, Dale Ihrke and Chandler Goodwin. The motion passed with a unanimous vote.**

### 41 42 **2. Approval to purchase a 2018 F-250 Pickup for the Operations Division**

43 Jon said this is to replace the 2004 operations pickup. This pickup is a 4x2 but mostly stays on sight, so it would  
44 be adequate. These are all state bid quotes, from Ford, Chevrolet and GMC. The Ford was \$300 cheaper than the  
45 Chevrolet for a comparably equipped vehicle. Brian asked if the current truck which is being replaced would be put  
46 in surplus once we receive the new truck. Jon said in the past the is what we have done, but he would recommend  
47 the vehicle, which is in pretty good shape, be moved over to the lab. All they have right now is a golf cart. With our  
48 participation in the Utah Lake Commission the golf cart is not conducive to lake sampling in the winter. That would  
49 increase the fleet size by one pickup.

1 Lynn Walker made a motion to approve the purchase of a 2018 F-250 4x2 pickup for the operations  
2 division, for the price of \$26,669.00 and to not surplus the other vehicle at this time. David Bunker seconded  
3 the motion. Those voting "Aye" – Mark Johnson, David Bunker, Mack Straw, Mark Christensen, Brian  
4 Braithwaite, Lynn Walker, Craig White, Tracy Wallace, Sullivan Love, Dale Ihrke and Chandler Goodwin.  
5 The motion passed with a unanimous vote.

## 6 7 **Communication**

### 8 **1. Asset Management Progress Report/Final Draft – Brown and Caldwell**

9 Brandon Heidelberger introduced Simon Watson and Ricardo Campos, who are with Brown and Caldwell's  
10 utility performance group and specialize in the replacement planning model being presented. Simon Watson said  
11 they were going to give a project overview of the asset management program and talk about the replacement  
12 planning model results. There will be some suggestive steps for the board to think about after all of this is done to  
13 move forward along the asset management program.

14 Simon Watson, Brown and Caldwell, said first they went through and conducted condition and consequence of  
15 failure evaluations, then identified short term R&R (repair and replacement). Short term is the first five-years; now  
16 we have to develop a prioritized CIP plan which is long-term items out past five years. Simon thinks the replacement  
17 planning model is going to be a valuable tool, which is really going to help the District with long term funding.

18 Ricardo Campos, Brown and Caldwell, said the objectives of the replacement planning model task, which is the  
19 final task, is looking to estimate the overall value of the District's assets that were evaluated; including the plant, the  
20 collections systems and lift stations. Also, determining long term funding needs based on repair and replacement  
21 costs. Some of the key questions asked were, what the District owns, the asset inventory and what we can do with  
22 that knowledge. Also, how long are those assets going to last, based on when they were put in, their useful life and  
23 how we can optimize the useful life, and when they do fail and need to be replaced or repaired what the associated  
24 costs will be. Ricardo said also to forecast those costs so the District can plan for their long-term investment needs.

25 Ricardo said as part of this assessment they look at the full life cycle of the treatment plant, the collections  
26 systems and the lift stations. As part of the life cycle they look at the initial acquisition cost. The assessment would  
27 be for all the infrastructure, to make assumptions about how long those assets would last and how much they would  
28 cost to replace. When talking about rehabilitation, those are things that are not day to day maintenance activities, but  
29 things being rebuilt or replacing parts to restore it to what it was originally intended to do. These tend to be more  
30 costly tasks, and often times get capitalized.

31 The remaining useful life is a key concept for all assets. There a couple of ways to look at that, either based on  
32 the number of years of useful life or percent remaining useful life, based on installation dates and typically useful  
33 lives based on industry standards. Ricardo said during the process for developing the replacement planning model;  
34 they collected the assets inventory from condition assessment to gain an understanding of all the different  
35 infrastructure for the collections system, lift stations and the plant. Based on the documentation from the District  
36 there was a good understanding of years in service (installation dates). They also looked at obtaining some financial  
37 information as far as initial installation costs and then to put together an R & R program and understanding for each  
38 asset. Those things together provided the assumptions and the material to develop the overall refurbishment and  
39 replacement plan that will allow us to get those costs by year.

40 Ricardo said this study did not include anything related to capacity, growth or regulatory driven projects. This is  
41 strictly replacement of existing infrastructure focused on replacement and rehabilitation. Brian asked if there was a  
42 place in the program to allow for those because we are one of the highest growing areas in the country. It will have  
43 an impact to some degree. Simon said the best way to take that into account would be to look at your long-term  
44 master planning for your expansion and overlay it on the replacement planning model.

45 Ricardo said as part of the assessment they also looked at a couple of benchmarks. The one shown is from  
46 NACWA, and essentially it looks at distribution of capital needs. There are different types of expenditures that  
47 contributors to this particular financial survey had for their capital program; forty two percent of capital needs were  
48 allocated to replacement and repair of infrastructure. When looking at the District's 2015 and 2016 capital budget for  
49 2016 it was about 26% and 2015 was about 46%.

1 Ricardo said another benchmark is from Qualserve which is a combined effort by AWWA and WEF. One of the  
2 things they provide is a renewal and replacement rate that compares the R & R spending at utilities against the total  
3 present value of the infrastructure. The top benchmark is in 5%-12%, the bottom is 1%-2%, and the median is 3%-  
4 4% range. Ricardo said to calculate this, they have put together an overall replacement value for the District's assets.

5 From information provided by the District, the last couple of years has been around 1%-2%. The R & R total  
6 average annual needs, for the District including the plant, lift stations, sewers and manholes is around \$10 million for  
7 the analysis period of 2023-2040. That percent matches up well with the median for the benchmark of the 4% range.  
8 Obviously, there is not an even split between the lift stations, the plant and the collections system. The plant average  
9 is at about \$7 million annually. Ricardo said they looked at the big-ticket items and largest time frames were in 2028-  
10 2032 which included items like the East Bioreactors, Biofilters, and Belt presses. Then again in 2037-2040 for the  
11 generators, switchgear, East clarifiers and some of the buildings.

12 These long-term estimates were a desktop exercise based on typical useful lives and installation dates of the  
13 infrastructure. It was combined for the short term with the condition assessment that was done, where they looked at  
14 the actual condition of the infrastructure. With those things we have a long-term picture along with short term needs.  
15 When these assets need to be replaced depends on different factors such as how they are maintained, how they are  
16 operated and they may need to be replaced sooner or later depending on those factors. For the two lift stations the  
17 average annual was around \$1.5 million. The sewers and manholes average annual was also around \$1.5 million.  
18 There is a big spike around 2037-2040, primarily due to a 24" reinforced concrete pipe (RCP) that was installed in  
19 1977. That takes you to the \$10 million annual average for the total needs. Overall, the conclusions from the  
20 replacement planning model assessment done for the long-term R & R established a total replacement value for the  
21 District assets of \$256 million, proposing \$10 million annual funding for R & R to sustain the infrastructure over time.  
22 The benchmarks supported those findings and this information will support and provide data the District would need  
23 in conducting a rate study.

24 David Bunker asked how many rate payers we have at how many connections. Jon said he couldn't give an exact  
25 count on that because we deal in ERUs, which there are about 43,000 ERUs. David Bunker asked how much we put  
26 into repair and replacement in our budget now. Mark Christensen said we have a \$10 million capital budget this  
27 year, plus we're budgeting an additional \$4 million for depreciation. Mark Christensen thought we could cover it  
28 within our existing rate. Mark Christensen said he would be interested in looking at a rate study to reduce our capital  
29 reserves and reducing our rate for our residents. Simon Watson, Brown and Caldwell, said he worked at a utility for  
30 24 years. He would like to point out, when talking about reserves, you are going to have this ebb and flow in your  
31 dollar needs; to keep a continuous \$10 million across, you are going to want to build up some funds to make sure you  
32 have those funds when big spikes come up.

33 Simon said the Replacement Planning Model makes you start to think about how you can move the dollars around  
34 and do some different types of investment along the way to maintain your facilities and start to smooth things out.  
35 Mark Christensen said he would rather bond as we get closer to it and let the rate payers at that time participate rather  
36 than keep huge balances. Simon said this allows you to show how you are to bond and/or raise rates. Simon said  
37 with the model, you get a good idea on your 5-year plan, but when you start getting out to 10, 15, 20 years, it starts  
38 getting a little fuzzy, based on how you are maintaining and what technology you use.

39 Simon said we did a high level of service. Typically, you then want to establish performance metrics that support  
40 those levels of service. The other key part is asset hierarchy, which is going to become important as you move into  
41 your new CMMS. Simon said the condition assessment was a onetime snapshot done this year. It needs to be a  
42 formalized program done on a repetitive basis, so you get a continuous look at how your assets are performing. You  
43 can eventually load that into the RPM model and get some more hard data. All of these things need to be done  
44 outside of the CMMS and loaded into it. Once you get this in the CMMS, you can see where you are saving the  
45 money and start doing the comparison of whether you are spending too much money on one asset and it is time to  
46 replace it. These things need to be put in place before you can use the tool. The CIP plan needs to be reviewed and  
47 updated annually, because it can change as things move along and deteriorate. The replacement planning model data  
48 can be used to put into your long term financial planning to support your rates and your funding mechanisms.

49 Dale Ihrke said we were hoping we would have this information by September and we would be able to have a  
50 sense of long term financial need is, but this does not include capacity or regulatory drivers, O & M increases. So,

1 this is a big part of the puzzle but not the whole thing; there are some financial layers that need to go on top. Brian  
2 said the regulatory changes do not typically change overnight so we could plug those in over a period of time. Dale  
3 said this gives a good sense of the level of expenditure the District should be planning for the next 20 years out.  
4 Before we had this, we knew there were expenditures but we did not know what level. Dale said we had a \$10  
5 million capital, but we are not bringing in enough to fund \$10 million capital every year and O & M; we are dipping  
6 into unrestricted. Mark Christensen said his concern is it looks like we have spent about \$83 thousand towards  
7 capital this year, and there is a \$10.2 million capital budget; these are resources not being allocated. David Bunker  
8 said he thinks that capital project fund is actually a separate capital project list; it is all the projects the District has on  
9 the books, some of those are restricted fund qualified. What we are talking about is projects we cannot use restricted  
10 funds to fund. Mark C. said our financials show about \$522 thousand worth of impact fee projects to which this  
11 financial does not show us spending any of that money yet. Mark C. said he wants to look at this in its total and is  
12 anxious to see the final result but also to see a revenue study which reflects what we actually have been expending  
13 and what we actually need in comparison with our final reserves. Mark C. said he thinks it's great to carry a healthy  
14 balance but we are not going to keep up with our capital if we are not keeping up with our projects. David Bunker  
15 said his quick calculation is we are spending about \$1.7 million on repair and replacement annually. That number  
16 would need to go up substantially.

17 Jon said the board just approved \$500 thousand. That does not reflect here. There is also camera equipment  
18 which is just under \$200 thousand. There is money out there that we owe so the percentage will go up. There are  
19 some things we have put on hold, like the blowers. We need to make sure everything is plugged in. Brian said this  
20 was a start, now we need to tighten it down, refine it, then come back with some numbers and we can talk about the  
21 philosophical beliefs of whether we want cash or bonding or a combination. Mark Johnson asked what happens if we  
22 hit a plant expansion requirement right during one of those spikes, how do we plan for that? David Bunker said you  
23 can use restricted funds for the expansion because you are adding additional capacity. There is analysis on what  
24 portion is considered a deficiency, that would have to come out of the repair and replacement fund. Brian said with  
25 any expansion, we will be able to see it at a far enough distance to plug it in. Mark Johnson said he can foresee a  
26 critical debate whether we hold off and spend more money at the time these spikes happen or do we cushion the blow  
27 so we do not run into those large expenses over a 4-5-year time period. Brian said if we see a spike coming and see  
28 the plant expansion coming at the same time there may be some things we can adjust and make it happen as 1 project  
29 instead 2 and going out and bonding 2-3 times. Jon said the level of service needs to be defined too because that  
30 would drive projects we would do sooner than later.

31

## 32 **2. Manager's Report**

33 Jon said we had the Utah Lake Legislative Tour and it was a success. There were 65 people; several members of  
34 the media, water quality board members and representatives, and legislators from all over the state. Brian asked if  
35 we had all their names. Jon said yes, he would send those names to Mark Johnson and he could forward them to the  
36 board. Jon said they went out on four different boats. They got to see where we discharge, the Lindon Marina, Sandy  
37 Beach, Provo Bay and they also some of the problem areas. One of the plugs we made was funding for research.  
38 Jon said each boat had a scientist/researcher talk about specific things. They also stopped by sampling stations the  
39 State has on the lake. They showed how they tested for algae and how they detect toxicity. They learned there was  
40 not toxicity and a harmful algal bloom is not necessarily harmful. Brian said there are certain people who want there  
41 to be a problem in Utah Lake so they will get funding to dredge and clean it, which they think would eliminate all  
42 these problems; were those individuals on the boats. Jon said no, they were invited to the presentation given before  
43 the boat tour. There will be a follow up meeting for those private enterprises to come in and discuss technology that  
44 is available.

45 \*David Bunker left. 7:08

46 Jon reminded the board that NACWA elected to come here for their Leadership Retreat and Region VIII Forum  
47 on October 24-26. The 26<sup>th</sup> is an open day where Board members can attend at no cost. It is at the Grand America  
48 Hotel from 10-2.

49 Jon said the plant was in compliance for the month of August. Brown and Caldwell have a proposed a project in  
50 the asset management to level out the phosphorus. The YTD average was 1.28 mg/L. We made some changes in the

1 last two weeks and the phosphorus level for the last two tests was .72 mg/L, and .84 mg/L. We have some physical  
2 constraints; if we need to take certain units out of service we can lose the phosphorus removal very quickly. One  
3 thing we should define in level of service is to go ahead and add chemical addition to make sure we ensure the  
4 phosphorus average. That will give us until 2030 to do something where we have to go to the lower limit; so, we do  
5 it once rather than twice. There are some other things we need to add to the level of service in our capital projects;  
6 the blowers, where there is an issue with purchasing, and controls. Jon said he asked Brown and Caldwell to prepare  
7 a task scope for our biosolids study, and the phosphorus removal.

8 Jon said there was a Utah Lake Commission meeting, where he and Sullivan Love were in attendance. They  
9 discussed the POTWs role and also discussed the legislative tour. They are going to hire a facilitator for that study,  
10 which will not start before the beginning of the year. Sullivan said he was not aware the state is out doing as much  
11 sampling as they are. There was a question asked if the E. coli was human caused or animal caused and they are  
12 going through quite process to define and identity whether it is human or animal cause. Jon said they can  
13 differentiate that and the question is coming out now because in some of those areas there is a contributing transient  
14 population. The state has \$1 million grant they got from the EPA. They also have \$1 million from the Water Quality  
15 Board which comes from the state revolving loan fund, given to the state by the federal government. Our council is  
16 continuing to do their studies, with the money we donate; the whole council together contributes about \$1.2 million.

17

18 **Closed Meeting**

19 There was no closed meeting.

20

21 **Adjourn: Brian Braithwaite made a motion to adjourn. Dale Ihrke seconded the motion. All present**  
22 **“Aye”. Meeting adjourned. 7:17 p.m.**

23