

Timpanogos Sanitary Sewer District
Administrative Board Retreat Minutes
6400 North 5050 West Utah County, Utah

APPROVED

September 17, 2026

8:00 a.m.

Conference Room

Board Members:

Present:

*Chandler Goodwin – Chair	*Mark Christensen – Vice Chair
Dave Norman	Brian Braithwaite
David Bunker	Mack Straw
*Neal Winterton	Brian Voeks
Joel Thompson (ex-officio)	Richard Nielson (ex-officio)

Electronic: *Shane Sorensen

District Staff:

Richard Mickelsen, District Manager	Shannon Hansen, Administrative Manager
Sam Grimes, Treatment Manager	David Barlow, District Engineer
Steven Carter, CFO	Devin Langford, CTO
Addisan Winn, Risk Manager	Danette Smith, Board Secretary
Brian Selck, Lab Director	Wootton Redmond, Operations Supervisor

Others:

Mark Bell, Hayes Godfrey Bell PC	Trevor Lindley, Brown and Caldwell
Brandon Wyatt, Bowen Collins & Assoc.	Wyatt Anderson, Bowen Collins & Assoc.
Ryan Bench, Carollo Engineers	Brad Rasmussen, Aqua Engineers
Wade Stinson, Aqua Engineers	Christian Logan, Aqua Engineers
Dave Epstein, Jacobs Engineering	Susan Spore, Brown and Caldwell
Ryan Dooley, Brown and Caldwell	Mark Hansen, Brown and Caldwell
Brian Child, Olympus Insurance	Darrell Child, Olympus Insurance
Sullivan Love, Resident	

Board Retreat - Rich Mickelsen 8:05 a.m.

1. Public Comment

There was no public comment.

A construction update video was shown.

2. Safety Report - Addisan Winn

Addisan Winn, Risk Manager, said the District's E-MOD rating has increased slightly to 1.05, which is still close to industry standards of 1.0. The change was driven primarily by several minor claims. Addisan said the focus is on prompt reporting, early treatment and to modify duty when appropriate. This helps to prevent more serious loss claims which have the most significant impact on the EMOD rating. In 2025 five workers compensation claims were filed with four resulting in medical care. Two claims have been reported so far in 2026. Despite these claims, overall costs remain relatively low. One positive outcome from 2025 was avoiding a lost time claim by providing modified duty to the injured worker. The employee was able to remain on the job and with their crew everyday thanks to the supervisor's quick response and flexibility in finding work. This supported their recovery while minimizing claim costs and EMOD impact. Another benefit of lost time or modified work not commonly talked about is that it significantly helps the injured worker's mental health. Being with their team every day also prevents the worker from being worried about coming back to work.

Property and liability claims peaked in 2017 and have remained low since. Last year, the District had one property claim. Last year included one minor property damage claim. There was a bodily injury claim, but it was

1 withdrawn after investigation showed that it was filed with the wrong organization. No claims have been reported
2 this year for property liability.
3

4 **i. Insurance**

5 Brian Child, Olympus Insurance, said the District has historically had a renewal date of October 1st for their
6 insurance program. Brian said they have worked with staff to realign that to July 1st with the restructuring of the
7 District and the new fiscal year. This renewal term will be a nine-month program and will then fall in line with the
8 fiscal year moving forward. Brian said with Addisan's help, they evaluated every facility here to make sure
9 everything that would have a beneficial use in the future was insured. The treatment plant and two lift stations now
10 have an insured value of \$199,579,398. The current liability limit is \$16 million, which is in line with industry
11 benchmark for a facility this size. The YOY rate change/reduction is down 17.3%. The total premium is
12 \$363,737.00. This is specialized program designed for water reclamation facilities which address unique risks.
13 Brian said additional coverage options may be available prior to renewal date of October 1st which may result in an
14 increase in coverage and a reduction in premium.
15

16 **ii. Safety Training (Video)**

17 Addisan said she and Rich have been working on a safety video this last year. The purpose of this video is to be
18 able to send to potential visitors or contractors before they arrive on site. It has a brief review of some of our safety
19 rules for visitors, and hazards to watch out for. Addisan said they wanted to show the board before the construction
20 site tour. (Construction Site Safety Orientation Video)
21

22 **3. Plant Tour (Construction) 8:30 a.m.**

23 *Neal Winterton and Mark Christensen arrived. 9:00 a.m.

24 *Chandler Goodwin arrived. 9:30 a.m.

25 Meeting resumed 9:44 a.m.
26

27 **4. Overview**

28 **i. Manager's Report -Richard Mickelsen**

29 **1. Year in review**

30 Rich said CIP costs for the next five years, FY2027- FY2032, are projected at \$1,396,000,000. Collections costs
31 are at \$457 million, and treatment costs are at \$939 million. Rich said we are starting the budget process for FY
32 2028. Rich said this budget is a one-page summary like we have done in the past. We have kept it consistent with
33 the pro forma that we show the bonding agencies. We will go out for the \$200 million bond next week. We have
34 kept the increase for operation and maintenance at 3%. Rich said today we will be looking at the amended IFFP
35 (updated project costs incorporated in FY 2028 budget), the 2026 IFA and have a Public Hearing at 11:00. Rich
36 handed out the CIP worksheet with all the project costs. The engineers will give project progress updates, future
37 information and asks for next year. Rich said for project costs there will be additional jurisdictional/third-party
38 inspections and TSSD Admin/contingency reserve. For example, building permits with the county have not been
39 incorporated into the project costs and TSSD have been paying for those, so we now have asked the engineers to
40 add those. We also have added third party inspections. Rich has asked for a TSSD administrative/contingency
41 reserve of 3% to be added to future costs. The engineers will itemize those costs. That will be about \$30 million
42 extra. Rich said on the bond pro forma they asked why there is \$30 million extra. Rich wanted to make sure those
43 costs are identified. Neal asked what percent that \$30 million represents? Rich said 3%. Neal asked if impact fees,
44 the bond, and proposed increases in user rates will cover these costs. Rich said yes. Today Rich will cover:
45 Following the Plan, Form of Government Change (Timpanogos Sanitary Sewer District), Plant Compliance,
46 Biosolids, Odor Control, Limno Corral, Water Reuse, ITC update, District Manager Outside Influence, Staffing,
47 and Asset Management.

48 Rich said following the Plan includes – 2020 Master Plan, 2026 IFFP Amendment & 2026 IFA, 2023 Zions
49 User Rate Study, FY 2028 Budget, CIP Worksheet (260917), 2024 TSSD Staffing Plan, and the 2025 Asset
50 Management. With the 2023 User Rate Study the board approved increases in user rates of 40% in 2024, 15% in
51 2025, 15% in 2026, and 15% in 2027. Going forward a 3% rate increase was identified for cost of inflation. We will
52 reevaluate that for FY 2028 to see whether we want to continue that. Rich said the bonding agencies asked why our
53 coverage is not meeting the 125%. Rich told them that the engineering firms have been very conservative and if
54 you look at our history, we continually spend less than the engineers' projections. As we get under contract with
55 these contractors, we will have more real-time updates and better projections. Rich said let's keep spending as we
56 have projected and come in with our actual dollar amounts before we make another rate change.

1 Rich said the plant is meeting all discharge limits. The effluent ammonia is higher than what Rich likes at 2.52
2 mg/L, but he anticipates those numbers will drop as we replace the diffusers in the diffuser project. Our total
3 effluent phosphorus average YTD is .747 mg/L, and the average for last month was .974 mg/L. Rich expects with
4 the cooler weather, we will continue to meet our total effluent phosphorus for the year.

5 Rich said with the biosolids, we have started on the thermal dryer project, which is part of our 50–100-year plan.
6 Right now, we are disposing in the landfill as that is the only option we have. Rich will have the engineers lay out
7 how we will move forward with development of the Elberta property once the thermal dryer is complete and
8 discuss the pro forma on the pelletizer. There will be more details to present to the board in future months. We are
9 working with the Wasatch Front Water Quality Council, and the other plants across the Wasatch Front to look at
10 disposal options or land application of our biosolids. As that develops, Rich will provide information to the board.
11 It is our intent to use thermal dryers and then have that implemented as fertilizer for farms to help their crops grow.

12 Odor control has been an issue and until we get our plant upgrades complete, we are going to keep fighting this
13 issue. Rich's main objective is to contain the odor, capture it, and then clean and scrub that odor. We have put caps
14 on our distribution boxes and still need to put rubber containment to close those top seals completely. We have put
15 systems in place to haul the biosolids off site as quickly as possible to contain the odors. Rich said we have a tent to
16 store the hauling trailers while they are in transition. They want to put in a rapid door to keep the odor contained as
17 we scrub that and pre-purchase the odor scrubber for the primary filters so we can use it twice and not waste our
18 resources.

19 Rich said we continue to do the Limno Corral study. It keeps the data we started five years ago and helps us to
20 know about Utah Lake. As we talk to DWQ, they see what we are trying to do for the lake. We run biology here at
21 the facility to clean the water, and we look at what we can do to help the ecology support itself so it alone will do
22 its work. We had a paper published on August 27th, 2026 "Sediment Resuspension Controls and Light Attenuation
23 Ecosystem Functions in a Large Shallow Eutrophic Lake" We are also preparing a manuscript for another article
24 that supports the work we are doing. Our intent is to help other entities like the Utah Lake Authority and the
25 legislators to make good decisions on the lake.

26 Water reuse continues and as we do package B, this process will have type I water we are going to be able to
27 reuse. Rich said we have come up against a roadblock with the Utah State Legislature and so he has commissioned
28 BYU and Hansen Allen Luce to prepare a paper to show that water reuse is good and good for the Great Salt Lake.
29 Rich said it will be ready for the 2028 legislative session. We will finish the paper, get it published, and then be
30 able to show actual gallons getting back to the Great Salt Lake through this reuse process. Rich said the ITC (tax
31 credit) we will receive as we do our renewable natural gas project. That will capture gas from the anaerobic
32 digesters, clean it and send it back to the grid. There is a three-phase process with Deloitte (tax advisor). They have
33 completed phase one, as we began the construction of the project before January 1, 2025. The next phase we will
34 need to be under construction continually until we complete the project to get our ITC credit refund. That refund
35 has been identified as \$143 million. Deloitte will evaluate every quarter to make sure we are meeting the ongoing
36 documentation. Brown and Caldwell staff have been on top of that documentation. Rich thanked Mark Hansen for
37 following through to get all the contractors on the same page. There is a lot to document to get our funding and then
38 they will put together a final report to submit to the IRS.

39 *Shane Sorensen arrived. (online) 10:08 a.m.

40 Rich said he continues to try and have an influence outside the District. One way is through impact fee training.
41 We reach out to member cities for that training. Rich appreciates member city staff who come and participate in the
42 impact fee training. Another outside influence is Rich being Vice Chair of the Utah Lake Watershed Council. Also,
43 in the spring, Rich teaches at UVU (Environmental). Rich said we have been able to hire a couple of employees
44 from that process, and it has been highly effective for us. One of those people now teaches our staff because Rich
45 can trust that he taught her well. Brian Braithwaite said he thinks the impact fee training and these other things are
46 well worth the resources. Brian thinks the payback is valuable. We may not see it today, but if we do not do those
47 kinds of things, we will feel it on the other end. Brian thanked Rich for implementing this.

48 Rich said part of our 2024 staffing plan included hiring a CFO, Steven Carter, who has been very helpful to us
49 in our documentation for the bonding and as we plan for budgeting, also CTO, Devin Langford, who does all our
50 cybersecurity, and a Risk Manager, Addisan Winn, who is exceptional and does a great job of following through.
51 She has completed the emergency response plan and is reaching out to the county and other agencies to see how we
52 can work together as a team. Rich thanked Addisan for picking up the slack where we have let things fall through
53 the cracks. The bonding agencies wanted to know why we had an increased cost in our employee wages/benefits. It
54 is not all to them but those are all senior level wages, credentials, and experience. Rich will continue to follow the
55 2024 staffing plan, which is to add 2.5 employees in 2028 and 1 more in 2029.
56

2. Asset Management

Rich said he introduced this Asset Management last year. We normally look at this one year at a time but since we moved to a fiscal year, he had Sam look at 2027 and 2028. Sam said it is an additional \$24 million. Rich did not think that could be right and asked Sam what we were missing. Our O & M repair and maintenance budget is about \$2.5 million. We will be paying for those through our capital improvement project plans which we have already identified, so this \$24 million is not additional dollars we have to spend, as we have already incorporated those through our master plan. Rich said an example of that is TP-4/5 Clarifier rehab, we are spending about \$14 million on those. Those are part of the asset management that have been identified and incorporated into our 2020 master plan. Mark Christensen asked about the money in the O & M budget if it does not get used. Steven said the fund balance would not be affected, and that budget line would get amended. That would be budget or cash available for next year.

ii. Operations/Maintenance Report - Sam Grimes

Sam Grimes, Treatment Manager, said the asset management plan is really a component of the total master plan. It assesses everything inside the plant, all the moving components, buildings, et cetera. The last phase in 2025, Brown and Caldwell gave us useful life, replacement cost, and condition assessment so we can adjust that useful life if necessary. Sam said they have taken that and imported it into the asset management software, Eptura. They found when they imported each asset, and looked at it individually, they can get a useful life and expectation of the year to replace any certain asset. Having taken their data and put it into these finance buckets, it suggested \$24 million over the next two years. Which are only about two budgets: repair and replacement, and fleet. We set our annual repair and replacement budget based on necessary items that we have not already taken the foresight to look at and plan for. Sam said he has not yet had time to extrapolate these nine hundred plus assets with these details. But that is the goal. As we keep going, we will have a spreadsheet that shows when these assets are scheduled for replacement, and how we are going to address that.

Sam said as we have identified many components that need to be addressed, one is backup power and backup systems. This is a hot topic. Sam said with the amount of growth and activity that is taking place in northern Utah County, we do not want to be caught off guard if there is a grid failure or a total building failure due to natural events. We have identified this as a critical need. There is an auxiliary trailer, or power distribution trailer (Doom's Day Trailer). If we lose power, we can roll this device up, plug our generator into it, and be able to feed any critical asset that we have at the facility or our lift stations. If a lift station goes completely down, we would be able to go in and still have control over that lift station. As part of this, we will have backup pumps that are sized for our influent pump station, BHLS and Dry Creek Lift Station. Sam said they feel this is a necessary investment for the District to ensure that we are not caught off guard. The alternative would be renting equipment. This is very specialized and typically, to rent this equipment, they are not close and they would need to be prepped and shipped to us. If we had something like this, we could react within 20-30 minutes.

Chandler asked how long it can sit, without being used, and still be useful? Sam said it would need to be exercised but it is mostly electrical equipment, so there are not a whole lot of moving components. Life expectancy is 20 to 30 years. Brian asked how long during an emergency it would be able to run, and would it run 100% of the facility? Sam said no, not 100% of this facility. It could run our influent pump station or BHLS. Brian asked if we have a week-long power shutdown with only the use of this, what are the ramifications? Sam said this could be a solution that could go for a week, or a day, and be self-efficient. The only thing we need is diesel fuel. Mack Straw asked if the District has a backup generator in place. Sam said yes. Mack clarified that this is a backup to the backup in those cases. Sam said yes, it would also house control panels if we lost any controls to our equipment. Mack asked if there was on-site fuel storage. Sam said yes. Rich said this comes from last year's discussion with the board. We have a generator at the lift station, which is part of the asset management to be replaced. We did not want to replace that, knowing we are going to replace the lift station, which will be operational by 2029-2030. There is money in EL-1 and EL-2 projects for this. The intent is to build and replace the generator for the current lift station to get us through the three years and then have something we can reuse going forward. We have also had problems with pumps at that lift station, so we want to be able to have pumps that could provide that support. It is not going to replace what we are going to be putting in place in the future. This is to help us get through the next three years and then reuse it as we need in the future. Sam said our existing Boat Harbor lift station is the biggest risk we are trying to address here. We do not want to spend a couple of million dollars replacing equipment that will be obsolete in three or four years. We feel like this is a decent solution that could provide future benefit as well.

Joel Thompson said Jordan Basin had a power outage over Labor Day. It is not always just power, it is also VFDs, and PLCs. The lead time for that stuff is ridiculous. It would be good to have a variety of those on site you

could take throughout the facility or throughout the different lift stations perpetually. It is easy to rent a generator, but it is not easy to find the right VFD, PLC or spare pumps. That is where this makes a ton of sense to Joel. He has had similar concerns come up. It could be a power grid issue, a transformer, or a transfer switch that does not work, this would help address outside of just backup power. Joel thinks it is smart. Mark Christensen thanked Rich and Sam. He appreciates the way they are planning for asset management and capital. Mark thinks these are the kinds of recommendations we really want to rely on Rich and staff to make better decisions and have multiple optimal solutions available. Mark thinks it is a good ask; it is just going to be how to price that. Rich said he thinks it is going to be within budget. Brian Braithwaite said clarity of the value you add is helpful for the board to see. Neal asked if the asset software includes a criticality component to the analysis, so we are not just replacing something that is not a critical component. Sam said yes, and as we maintain these assets and do repairs, we are documenting work in Eptura. If we see an asset that still has 10 years life, and we are spending a lot of money and man hours on it, we may bump that up a little on the list. Sam said the repair and maintenance budget ask is \$2.5 million and the other \$20 million plus is accounted for in capital improvement projects that are underway or in design.

5. Engineer Reports

i. Bowen & Collins

1. Westside Collections Projects

2. CL-R1: Replace and Upsize Lehi/American Fork Outfall

3. LS-3 :Dry Creek Lift Station Improvements

4. SR-1: Structural Rehab of 60-inch RCP

Brandon Wyatt, Bowen & Collins, said they have been working to update the collection system capacity between the plant and the northwest part of the District. That includes the new boat harbor pump station, a new 78-inch lakeside interceptor, and a double barrel force main 48-inch inside diameter to bring those flows from the pump station to the plant.

Brandon said Dry Creek Lift Station is up on the shoulder of SR-92. It is in the right-of-way of that highway, and this pump station was there before the improvements of SR-92. This pump station needs to double its capacity. To attain that capacity, they are going to expand the pump station footprint. There are three existing pumps serving this pump station now and four new pumps will be installed, as well as new electrical equipment and controls. Brian asked if this would meet full capacity of what is expected to come down that line. Brandon said this receives flows from Suncrest and Highland. There will be additional flows from Highland and the new Texas Instruments addition. Brandon said it will only take a portion of the housing development up there as part of the flow can go through Lehi. This is going to meet their understanding of what build out will be. Significant challenges with this are because it is so close to the right-of-way, the snowplows push snow on top of the generator there and it is a significant corrosion concern. Brandon said they are trying to figure out a way with UDOT to put a snow shed to protect that generator and cooperation to not throw it down there in the first place. There is also an odor control issue they are trying to overcome. The hope is that this project will be bid in the fourth quarter of 2026 or first quarter of 2027 and they will move on construction management and construction during that time.

Brandon said the structural rehab of the 60-inch pipe (SR-1) between BHLS and the plant is wrapping up. They lined about 5,000 feet of pipe with the CIPP liner and rehabbed the manholes along that line. Before this started, the interior of that pipe was significantly degraded, with serious hydrogen sulfide corrosion. Rebar cages were exposed and becoming a problem. The District hired Insituform to come in under state bid contract. They installed a series of bypass pumps to dry out the pipeline so it could be cleaned. There were two different methods they used for lining this and it is one to one and a quarter inch thick. Manholes had a new concrete coating and grout to seal. This project is wrapping up and should be done by next week.

Break 10:55

6. Public Hearing for Impact Fee Enactment 11:00 a.m.

Rich said the IFFP amendment and IFA update are available for public to view. Chandler Goodwin opened the public hearing on Technical Memorandum Amendment to the IFFP, the 2026 IFA and the 2026 Resolution revising the District's 2025 Impact Fee Enactment, which will be considered later in this meeting. Chandler invited anyone from the public who wished to give a comment to do so.

There was no public comment.

Chandler Goodwin closed the public hearing on the Technical Memorandum Amendment to the IFFA, the 2026 IFA and the 2026 Resolution revising the District's 2025 Impact Fee Enactment.

Engineer Reports (continued)

ii. Horrocks

David Barlow said Horrocks had a prior commitment, and he gave an update on CL-R2. David said we decided to bid for the first of the year rather than doing temporary pavement and maintaining the road base over the winter. We will do two pre-qualifications; one under \$20 million, which this project would fall under and one over \$20 million which CL-N2 and CL-N4 would fall under. The start of the year would be an ask for a CM contract with Horrocks. Typically, the engineer that designed will also do the CM. David Bunker said, with all of the projects we have, does it make sense for the District to hire an internal individual to do the CM on some of these projects? Sometimes there is a good reason to have an internal construction manager on board. David Barlow said he had not thought about it, but he was open to it. Mark Christensen inquired whether we would be able to capture all the costs involved with impact fee eligible projects with an internal CM. David Bunker thought internal staff could calculate their time on impact fee eligible projects and have that reimbursed with impact fees, if documented. There was more discussion and the need to look at it further. David Barlow said we have two in-house inspectors on these jobs as well as the consultants. If we were to remove the consultant from the CM, we would probably have to hire additional inspectors for that.

iii. General – Rich/David

David Barlow said we finished the CL-N1 project over a year ago. That went from Saratoga Springs to Lehi in 1900 South. We added a 66" line in addition to our 54". The SR-2 project would line that 54" line. We have decided to push that back a year because of the road construction going on now so there are not two contractors out there at the same time. We have enough capacity to do that. We will put as much flow as we can in the 66" line and line the 54". This is in the budget and has been approved. Neal asked if Saratoga Springs prefers to put this on hold. Mark Christensen said he would like to talk to his public works director and make sure we coordinate this together.

David said the EL-1 project is a new switch gear and addition on the building there. That is now complete. What is left on this project is to do a power quality study. As mentioned earlier by Richard and Sam, the doomsday trailer would come out of the EL-1 and EL-2 project budget.

iv. Master Plan Phase I - Brown and Caldwell, Carollo, Aqua, Jacobs

Trevor Lindley, Brown and Caldwell, gave a brief overview of the Master Plan. Multiple construction packages are tied to the MP numbers in the capital improvement plan. They were bundled as packages, mainly to recognize how the site would be configured.

Package A is led by Aqua Engineers, which is the thermal dryer that will produce Class A biosolids, and allow for much less tracking of the material. It reduces the hauling costs because it decreases the water weight and will improve our odor control. Package B is Carollo Engineers. That is related to the filters, UV, and Outfall at the end of the plant down by Utah Lake. It will preserve water quality on Utah Lake. It has potential for reuse and ensures reliable uninterrupted treatment. Package D is Jacobs, which is wetlands improvements, shoreline improvements, and all the wetland permitting across the whole program, including the off-site collections projects. Package C is Brown and Caldwell and is PCAD (primary clarifier and anaerobic digestion). This includes the egg-shaped digesters and is the heart of the solids handling upgrades. This will reduce the solids that need to be disposed of by about half. It maintains space for future expansion in a produced renewable natural gas (RNG) that can be marketed back to the grid for enhanced value to the district. Package E is Carollo Engineers, which is integral to package C. With digestion, there is risk of nuisance maintenance items in the piping. Package E is side stream nitrogen treatment, and side stream phosphorus treatment to mitigate that and make the RNG run smoother.

1. Package A/Biosolids Disposal Facility

The capital cost in the 2026 IFFP Amendment for Package A is \$85.5 million, 96% of current scope under contract, and \$3.2 million in contingency (TSSD controlled).

Wade Stinson, Aqua Engineers, said hauling wet cake is expensive and it takes a lot of volume. Pulling the water out removes most of that weight. This will reduce truck hauling by approximately 85%, taking it from 56 trucks to 8 trucks a week. This will greatly reduce the hauling risks as well as associated costs. There will be reduction in fuel as well as carbon emissions. Hauling and tipping fees will similarly be reduced. This product is going to be a Class A product because it's going through a process that meets the time and temperature requirements of the EPA and federal regulations. That provides an avenue for beneficial reuse. There's a lot of nutrients in this product, and once it's dried and easy to haul, this product could be marketable. They want to be able to make that available to avenues that would utilize that. As part of that, the District has been taking monthly sampling for about three years, which has allowed us to track the nutrients as well as heavy metals that are

1 associated with biosolids. They have a pretty firm grasp on nitrogen, phosphorus, and potassium levels. Wade said
2 this effort is so they can work with Richard and team to develop a SKU to provide the guaranteed analysis to make
3 it a marketable product. They broke ground around the end of January this year and the contractor is Alder
4 Construction. They have been great to work with. The product coming out has been exceptional. The project is
5 trending well on costs, and they are projecting about 30% of the project is complete. Wade said they anticipate
6 construction will be into early 2028. There are no additional construction asks for this project at this time. The only
7 ask for next year would be jurisdictional and third-party inspections, TSSD contingency reserve and any future
8 change orders that may come. The dryer equipment submittals were completed in May of 2025, and final approval
9 on both electrical and mechanical were given. The dryer equipment is currently being manufactured in North
10 Carolina. The dryers are still moving forward on the correct timeline.

11 Wade said with the thermal drying process and what is coming out the end of the dryers (he is calling a burnt
12 Cheeto). That product is great and there's a lot of use with that, however, it is light at about 15 to 25 pounds per
13 cubic foot. That comes into play when you start talking about packaging and distribution. To make it marketable,
14 they need to densify that and control the uniformity of the particle size. That way, whether it be agriculture or home
15 garden, they will be able to apply this product and be confident in how it is applied and the rate it is being spread.
16 Wade said they are currently under a scope for feasibility for what the pelletizing process at the end of the drying
17 would look like. Wade said their hope was they would have that here today. There were a few roadblocks, and they
18 want to make sure they have proper information. There is an area that has always been reserved for potential
19 pelletizing, and they are working with that footprint to make sure there is equipment that will utilize that space and
20 maximize the throughput of the dryers with that pelletizing. Based on this footprint, three main manufacturers were
21 highlighted: CPM, Kahl and Merrill Brothers. Wade said they are utilizing these three manufacturers to develop
22 equipment costs and potential installation costs. Beyond that, there's potential to set up some site visits for staff so
23 to see how this equipment is utilized.

24 In addition to just the equipment, Wade said they are working to develop a pro forma to help the board
25 understand the true value and how that may align with the cost of the product for the District. The third part would
26 be distribution. It's great to know the price, it's great to know the product, however, if it cannot be distributed, sold
27 or marketed locally, then there's a new obstacle to overcome. Wade said they are communicating with local
28 distributors to either supply with a private label to distribute locally, or market in the agriculture area. Rich brought
29 in examples of the product. Wade said with the fertilizer sample results, over the three years, They have a
30 guaranteed analysis of what Nitrogen, Phosphorus, and Potassium would be (N-6 P-4 K-.26). The true value of this
31 product is not so much just the NPK, but there's actually a high amount of carbon (35.4). Recent studies have found
32 beneficial use for carbon, in that it unlocks nutrients and microorganisms that are in the soil. It allows plants to
33 better uptake nutrients. Wade said they have not learned how to market carbon though, so our label will be focused
34 on NPK. Wade said there are heavy metals in our process. One of the more stringent limits that the EPA has with
35 land applied biosolids are heavy metals. This is a main concern for public when talking about land applying
36 biosolids. Wade said what they have sampled over the past three years, TSSD heavy metals are significantly lower
37 than the ceiling limits. Wade said they intend to have that feasibility completed in the next couple months, then
38 present results, and a recommendation whether to pelletize or not. Then move to preliminary design, final design,
39 and equipment selection.

40 The third scope is the property (48 acres) they assisted the District in purchasing in Elberta. At some point they
41 need to develop this property such that it can be a distribution facility for the District. The intention is to develop it
42 so you can store the pelletized product there and be able to distribute it to local markets. They would need to bring
43 in power and about 10-acre feet of water. They project there would be a few buildings on site. One would be an
44 office as well as a shop for equipment. Part of our stipulations from the county were all the product needed to be
45 stored inside a building. Wade said they did the initial development plan about a year ago. This project's been on
46 hold while package A was understood, and the pelletizing feasibility was complete. Once that's understood, they
47 will start work on the design attributes of developing this property. Neal said he wants to make sure that, as a
48 District, we do not become marketers or distributors for a retail product. He knows that is not the intent, but he
49 hopes we consider when we ask ourselves, is this something we should be doing within the range of treating sewer
50 for our cities. Neal's opinion is only if it makes extreme financial sense on every level should we go down that
51 path. You start to introduce a whole other set of assets, and everything associated with that process. If we don't have
52 to deal with it, let's not. Wade said the District has no current desire to facilitate or manage the marketing end of it.
53 They want to work through someone else that will handle the product. Rich said Neal's point is well taken.

54 2. Package B/E

The capital Cost in the 2026 IFFP Amendment for Package B is \$163.6 million, 96% of current scope under contract, and \$12.8 million contingency in reserve (TSSD controlled).

Ryan Bench, Carollo Engineers, said package B are processes to help with the final effluent before it goes to Utah Lake. It is a secondary pump station tertiary filtration, UV disinfection, chemical building, and the outfall. The past year there has been about 5,000 cubic yards of concrete poured. They have been out there inspecting rebar and making sure concrete trucks are meeting spec. There are a lot of large pipes, dual 63" HDPE pipes, to be able to push 100 MGD through these facilities at peak hour flow in 2060. Also, as part of this package, it provides the backbone of the medium voltage for all the other upgrades. From the Switchgear building, down to packages A, C, and B. Skyline Electrical have been installing major duct banks that are feeding power to all these upgrade projects. Those duct banks are covered with 3000 PSI concrete with red dye so when you're digging you do not hit conduits. Ryan said an application was done back in 2021 or 2022 for ARPA funding. Those funds were received this year, totaling \$8 million; \$4 million from Utah County and \$4 million from the Utah Division of Water Quality. That \$4 million from Utah County is attributed to this chemical building, which will be structurally built by the end of this year to meet those deadlines. They are definitely on schedule and budget for this project. Ryan said they are looking at substantial completion December of 2028 with final completion mid-year 2029. This is about 45% complete. The only future asks would be the third-party inspections that have been mentioned.

The capital cost in the 2026 IFFP Amendment for Package E is \$59.3 million, 7% of current scope under contract, and \$1.4 million contingency in reserve (TSSD controlled).

Ryan said package E deals with SSP (Side Stream Phosphorus) and SSN (Side Stream Nitrogen). Ryan said when he presented it last year, they were at about 30% and now they are at 90% complete. One thing they are doing is utilizing existing assets. Two big concrete tanks are being used now for solid storage before going to dewatering. When the digesters are in, these won't be needed and will be retrofitted as storage for downstream processes of SSP. Once phosphorus is treated, it gets stored there before it gets dewatered. There are covers on that because to provide odor control for that tank. The other tank is for SSN, where that process will help remove ammonia and nitrogen before it is sent back to the head of the plant. This is saving quite a bit in capital costs instead of building new concrete tanks. Some of the major benefits of package E are struvite mitigation and increased methane production. It reduces yearly chemical costs. In the chemical building there is alum, which helps chemically bind phosphorus to treat it to a lower level. It also adds improved dewaterability with cake solids, which is super beneficial for the thermal drying process. In the bioreactors, you remove a lot of phosphorus and ammonia, and that gets stored in the cells of the biology. Then as you waste, you send it to the digester. In the digester, that cell breaks open and you lose the phosphorus and ammonia and it gets sent back to the head of the plant after it gets dewatered. It is about 15% to 20% of your ammonia and phosphorus load that gets recycled back to the head of your plant. Package E will take that recycled stream and treat it. Ryan said it is super effective because it is low flow, but highly concentrated. To be able to treat it at a low flow is way more efficient and less costly than to do it in the mainstream. Building this process now makes it so in the future you do not have to build new bioreactors and secondary clarifiers to meet that 15 to 20% recycled load. A memo sent to the District last year states this could potentially save \$70 million in capital costs. This saves about a bioreactor and half of treatment and secondary clarifiers that you do not have to add in the future.

A good benefit to the package E, is the side stream phosphorus process is a tank, and you are pulling the air off that tank, making negative pressure and that decreases the pH. They will take the air off the top because it has got a lot of methane in it and then that methane will be sent to the RNG process. That gas alone is roughly \$25,000 to \$35,000 in RNG credits you are getting back. Another huge benefit is it reduces the struvite formation. Ryan said this is 90% complete. They have put a pause to go from 90% to 100%, while they are waiting for these other construction projects to catch up. This cannot be put online until primary treatment and digestion is online. They will bring it to 100% early or middle of next year. Future asks would be a construction contract, a CM contract and third-party inspections. Mark Christensen asked what the disposal process is for phosphorus and ammonia. Ryan said the phosphorus gets bound up in little struvite crystals, then gets dewatered and wasted and through the thermal drying process.

Lunch 11:45 a.m.

*Shane Sorensen left. 11:45 a.m.

Meeting Resumed 12:25 p.m.

3. Package C/TP-4/5 Secondary Clarifiers

The capital cost in the 2026 IFFP Amendment for Package C is \$605.1 million, 50% of current scope under contract, and \$18.3 contingency in reserve (TSSD controlled)

Susan Spore, Brown and Caldwell said Pkg C has up to \$143 million potential tax credits when finished. Most of Pkg C and a little bit of Pkg E are IRA eligible. Deloitte did finalize the beginning of construction in February 2026. They provided documentation of fabrication, mill certificates, and construction photos. They conduct quarterly audits to ensure all our paperwork is on track. Pkg C is 60% design on primary treatment, gravity thickening, thickening and straining, and anaerobic digesting. They are tracking closely to the projected spending on package C.

Susan said with the RNG (Renewable Natural Gas), they are working toward doing the directional drill to get the carrier pipe in place before the rail line comes through. While there has been some volatility RNG pricing market, the low point was around Covid, and it has been going up. The five-year average is stable. To get this pricing, it needs to be qualified, natural gas. To be qualified, it needs to go through EPA process and maintain the quality and specifications. Susan said they have been working with EPA making sure it meets Enbridge's specifications and will continue that coordination in case there is any change. The potential revenue is \$2.6 million return on investments. As there is more wastewater, it will generate more sludge and more biogas, and they expect the stream to increase. Ultimately, there will be about 11 GMPs (guaranteed maximum prices). This allows for continuous construction, which is one of the eligibility requirements for the income tax credit. Alder has hired a consultant that will help in getting the carrier pipe in place. There is Union Pacific, UTA and UDOT just for the railroad and they are also dealing with the City of Lindon and Utah County. It is good to get somebody that specializes in all those permits and government coordination. They are in conceptual preliminary design and now expect that to be completed in November. At that point they will have a number for final design and estimated construction costs. Susan said they have been coordinating closely with Enbridge for the last couple of years. The District completed the property purchase in June on the other side of the tracks and also worked with Lindon City. There was a coordination meeting a couple weeks ago for site prep requirements, and instrumentation. Whenever they build something like this next to a road, they will be sure that road is sized appropriately. There is also the Vineyard connector and how it fits into this. Susan said this will be the most aesthetically pleasing M&R (metering and regulation) facility as they are following City of Lindon architectural landscape. Hopefully, as you drive by, you will not know it's there. They are just over 50%; the future scope will be GMP 7-11 and third-party inspections.

Clarifier TP4/5 and diffusers TP3./NT-2 updates. The carbon fiber rehabilitation is so strong that the pipe around it can erode and it will hold. That liner will last even longer than the pipe or the clarifiers. Completion of the clarifiers is scheduled for 2028. The aeration diffuser replacement TP-3/NT-2 will help with the ammonia. The diffusers were past or at the end of life so this will improve the aeration and oxygen content in the wastewater. Rich said the new primary filters are going to be pie shaped (carpet fiber) and the solids will hold up on the carpet and vacuums will pick up those solids. There is also a similar type of product for tertiary filters.

4. Package D

The capital cost in the 2026 IFFP Amendment for Package D is \$15.2 million, 7% of current scope under contract, and \$200 thousand contingency in reserve (TSSD controlled)

Dave Epstein, Jacobs, said the main goals of Pkg D are different from the other packages in that they are not building treatment facilities, but rather facilitating those projects through mostly permitting. They are facilitating the expansion of the plant to meet the growing needs of the community and all associated regulatory requirements. They are taking that as an opportunity to enhance, preserve, and connect Utah Lake wetlands and wildlife habitat and in the process, engaging with a lot of partners and stakeholder agencies. They are also helping to facilitate the development of the Utah Lake Shoreline Trail, which increases connections between people, Utah Lake, and its wetlands. It also provides an opportunity for people to get closer to this plant and see the role it plays in providing clean water back to Utah Lake. Package D covers a large area and works with all the different packages, specifically in the permitting and the wetland mitigation. There was an agreement in the works for quite some time between TSSD and Utah County that is in place now. That covers land transfer and Utah County has hired a CNGC contractor for building the trail. Richard Nielson said the County has been working with Jacobs and appreciates all the work they have done. Richard said they have hired Gerber Construction, through the District's pre-qualified contractors. Once this is all finished and done in the next two or three years, there will be a good trail on the north end of the lake.

Dave said to facilitate expansion over the next years, they are looking at potentially mitigating one hundred acres. There are a lot of wetlands near the plant and by partnering with landowners adjacent to the Westside Collection Project, we could add another forty-one acres. That could get us to those one hundred acres and really facilitate the expansion. Dave said Brian Wing, (TSSD Botanist), has done a great job in caring for this land and has been involved in planting bullrush as native vegetation for a high-quality habitat. The asks are \$15.2 million

1 which include engineering support for the trail, wetland mitigation support for package B, and West Side Collection
2 Project, and CM. Utah County is covering the construction cost of the trail. Dave said they are at 60% design with a
3 lot of the trail and working towards construction on phase 1A. That will hopefully get started this year. Package B
4 has been permitted, and they are still in planning phase. The monitoring period will start in the next year, according
5 to the requirements of the permit with Army Corps. The permit has been submitted on the Westside Collection
6 Project, and they hope to have that approved and start constructing on the mitigation site next year.

7 8 **Approval of Minutes**

9 **1. Approval of meeting minutes of August 20, 2026 Administrative Board**

10
11 **David Bunker made a motion to approve the minutes of the August 20, 2026 Board Meeting. Brian**
12 **Braithwaite seconded the motion. Those voting "Aye" were David Bunker, Chandler Goodwin, Brian Voeks,**
13 **Mark Christensen, Neal Winterton, Dave Norman, Brian Braithwaite, and Mack Straw. Those voting "Nay"**
14 **were none. Shane Sorensen was not present. The motion passed unanimously.**

15 **Consent Calendar**

- 16 **1. TSSD Check Register**
- 17 **2. SR-1 – 60" Rehabilitation Project**
 - 18 **a. Insituform Technologies pay Request #2 (\$2,552,606.11) retainage (\$134,347.69)**
- 19 **3. TP-4/5 – Clarifier**
 - 20 **a. East Clarifier: Archer Western pay Request #24 (\$ 592,905.92) retainage (\$31,205.58)**
- 21 **4. Package A – Thermal Dryer**
 - 22 **a. Alder pay Request #6 (\$1,606,888.71) retainage (\$84,573.09)**
- 23 **5. Package B – Tertiary filtration and UV Disinfection**
 - 24 **a. Gerber pay Request #19 (\$2,567,503.72) retainage (\$135,131.78)**
- 25 **6. Package C – PCAD**
 - 26 **a. GMP3 digester Complex Piles and Deep Foundations –**
 - 27 **i. Alder Construction pay Request 19 (\$412,472.53) retainage (\$21,709**
 - 28 **b. GMP4 Digester Complex –**
 - 29 **i. Alder Construction pay Request #7 (\$1,742,961.69) retainage (\$91,734.82)**
- 30 **7. WFWQC – Amendment #4 (\$100,000 per year)**
- 31 **8. Insurance (\$360,678)**

32
33 **Neal Winterton made a motion to approve the eight items in the Consent Calendar. David Bunker**
34 **seconded the motion. Those voting "Aye" were David Bunker, Chandler Goodwin, Brian Voeks, Mark**
35 **Christensen, Neal Winterton, Dave Norman, Brian Braithwaite, and Mack Straw. Those voting "Nay" were**
36 **none. Shane Sorensen was not present. The motion passed unanimously.**

37 38 **Finance**

- 39 **1. Financial Report – Steven Carter**
 - 40 **a. Rating Agency**
 - 41 **b. Bond 2026**
 - 42 **c. FY 2028**

43 Steven said the District received ratings from Fitch and S& P. With Fitch we maintained our AA+ rating and
44 S&P downgraded us to AA-. The reports are in the packet if the board members want to read more of the details.
45 The pro forma highlights how our debt coverage without impact fees were below 1. Steven thinks that is the main
46 aspect of the downgrade. We are going to see what we can do to get our coverage without impact fees beefed up.
47 Next week Steven, Rich and Chandler are going to New York to price the bonds. Investors are looking that our
48 number one commitment is to satisfy our debt service payments after our operating expenses. We did just adopt our
49 FY 2027 budget, so these numbers are subject to change next year as costs come in and projects get bid. Steven said
50 that with the thermal drying we are projecting the hauling costs to be cut in half, reduced by about \$2 million. The
51 downside is that the gas to dry the solids will increase by about \$1 million. That is not until 2031. There are some
52 negative totals in 2030 and 2031. Steven said not to be alarmed, as we are going to be spending a lot of money, but
53 with cash from bonding and the WIFIA financing, those numbers are expected to stretch out. Steven said it may

look strong one year and bleak another, but we expect those funds to be evenly spent throughout those years. We are evaluating this on a year-by-year basis, to make sure we are anticipating when future financing needs are coming.

The auditors will be here the second week in October, and we are looking for another smooth audit cycle. We do not anticipate any hiccups. The Board can look forward to having them present their audit report at the November Board meeting.

Action Items

1. GMP-6 Piles and Foundations – Alder (\$49,290,950)

David Bunker made a motion to approve GMP-6 Piles and Foundations to Alder for \$49,290,950.00. Mack Straw seconded the motion. Those voting “Aye” were David Bunker, Chandler Goodwin, Brian Voeks, Mark Christensen, Neal Winterton, Dave Norman, Brian Braithwaite, and Mack Straw. Those voting “Nay” were none. Shane Sorensen was not present. The motion passed unanimously.

2. Task Order 2026-05 RE/ESDC for GMP-5 (Gas Upgrading Oversight) – Brown and Caldwell (\$4,209,699)

Neal Winterton made a motion to approve Task Order 2026-05 ESDC GMP-5 -Gas Upgrading Oversight for \$4,209,699.00. Brian Braithwaite seconded the motion. Those voting “Aye” were David Bunker, Chandler Goodwin, Brian Voeks, Mark Christensen, Neal Winterton, Dave Norman, Brian Braithwaite, and Mack Straw. Those voting “Nay” were none. Shane Sorensen was not present. The motion passed unanimously.

3. Resolution 2026-11 Adopt the Amended IFFP/IFA and Revised Impact Fee Enactment

Brian Braithwaite made a motion to approve Resolution 2026-11, IFA, Amended IFFP, and Revised Impact Fee Enactment. Mack Straw seconded the motion. Chandler Goodwin, Board Chair took a roll call vote. Those voting “Aye” were David Bunker, Chandler Goodwin, Brian Voeks, Mark Christensen, Neal Winterton, Dave Norman, Brian Braithwaite, and Mack Straw. Those voting “Nay” were none. Shane Sorensen was not present. The motion passed unanimously.

Communication

Mark Christensen asked if Rich wants to move the retreat next year, so it takes place when we are planning for a fiscal year budget. Rich said he was open and asked Chandler. Chandler said he and Rich have discussed this as a lot of cities ramp up their budget process in January. If impact fees, and user rates are set, then cities going into their budget process knowing those rather than having that adjusted midstream of your budget cycle. That's why we kept the retreat in September this year. Chandler said if the board feels like they want to have that at a different time of year then he is open. Chandler said maybe he would take a straw poll at the next board meeting to see how each board member feels. Rich said he would recommend that we have the engineers still provide project information in September, and to have public hearing to update our IFFP and our IFA so those continue to go into effect in January. That way it stays with what we have been doing and what the cities have become familiar with.

Adjourn

David Bunker made a motion to adjourn. Neal Winterton seconded. All present “Aye.” The motion passed with a unanimous vote. Meeting adjourned. 1:20 p.m.