

Minutes of TIFA LLC Meeting  
March 23, 2017  
11:30 a.m.  
City of Titusville Water Resources  
Mourning Dove Water Plant  
2836 Garden Street  
Titusville, Florida 32796

Persons in Attendance

Mike Brown, Miami Corporation, TIFA Management Committee Member  
Jim Ball, City of Titusville, TIFA Management Committee Member  
Sean Stauffer, City of Titusville, Water Resources Director  
Richard Broome, City of Titusville, City Attorney  
Andrew Jantzer, City of Titusville, Water Resources Deputy Director  
Anna Abreu-Ochoa City of Titusville  
Jim Boyd, Boyd Environmental Engineering, representing Farmton Water Resources  
David Fuechtman, Miami Corp. (by telephone)  
Helen Hutchens, Miami Corporation  
Farlen Halikman, Moore Stephens Lovelace, P.A.  
Jim Perry, GMS LLC

Jim Perry conducted the meeting.

**Action Items**

**I. Approval of the Minutes of the TIFA LLC Meeting of February 16, 2017**

Member Brown moved to approve the February 16, 2017 meeting minutes. Member Ball concurred and the motion passed.

**Financial Items and Reports**

**II. Presentation of the TIFA LLC Audit Report (Farlen Halikman)**

Mr. Halikman stated, I will begin by going over some of the required communications, the significant accounts used by TIFA are described and none of those have changed from the prior year. The largest estimates in the financial statements have to do with amortization and depreciation of the capitalized assets. There is as we will see later a little difference between the methods used for depreciation for these financial statements and for the tax return. There were no corrected or uncorrected misstatements noted so it was a squeaky clean situation. We don't express an opinion on the effectiveness of internal control that is not part of the scope of what we are doing; however, we do design the audit to identify deficiencies in internal control and particularly material weaknesses, which are deficiencies that can result in misstatements of the

financial statements. I'm happy to say we didn't identify any deficiencies or material weaknesses that we need to report today. With regard to independence the services we perform is the tax return and the audit no other services, nothing that would impair our independence and there are no relationships with either the city or with Farmton that we would view relevant to the question of our independence. There were no difficulties encountered in performing the audit, there were no disagreements with management and the only matter remaining to be able to sign this audit report as it is written is to obtain from you the management representation letter, which we will move to in a moment.

The financial statements on page 2 is our opinion, that paragraph that says the financial statements are presented fairly and in accordance with accounting principles generally accepted in the United States. On page 3 is the balance sheet and you can see there is about \$10.5 million of total assets and nominal liabilities just \$6,857 of accounts payable so it is pretty rock solid balance sheet in terms of leverage and working capital. You are in very solid financial shape. On the P&L side on page 4 we generate revenue through water sales and that is done in a predetermined, set price per gallon and we sent staff personnel to ride with Mr. Brown on December 31<sup>st</sup> and read those meters and the subtraction of last year's meter from this year's meter gives us the number of gallons that have been pumped and you multiply that by the price and we have a recalculation of your revenue and the audit procedure is as solid a procedure as can be done actually physically observing those meters.

On the expense side, we vouched significant expenses, recalculated those I could such as depreciation and amortization, and read the minutes and looked for anything that was a commitment for construction or that needed disclosure or anything that would impact the financial statements. The cash flow statement on page 5 starts with net income with roughly \$450,000 in net income in 2016, adds back depreciation because that is not a cash item and we end up with about \$733,000 in cash flow that was provided from operations. We spent about \$500,000 on purchasing additional wellfield assets then we had \$800,000 net go out in distributions so that decreased our cash that we had on hand by \$562,000 but we still have \$425,000 at the end of the year and that is still ample enough to meet obligations as they come due.

The footnotes, there were no changes from last year in a significant way. Does anyone have any questions on the financial statements?

Member Ball asked do you need an action by us to accept it?

Mr. Perry stated, typically we ask the board to accept the audit reports. They do stand on their own so you can't approve them.

Member Ball moved to accept the TIFA LLC 2016 audit report. Member Brown concurred and the motion passed.

### **III. Presentation of the Management Representation Letter (Farlen Halikman)**

Mr. Halikman stated once I get a signed copy of the management representation letter I will be able to issue my report.

Ms. Hutchens stated, the representation letter you will be signing as members is your representation that the financial statements are true and accurate depiction of the operations. The

content of the representation made in the letter is unchanged from last year. It is strictly updating the dates and engagement dates. The representations are basically unchanged.

#### **IV. Presentation of the TIFA LLC Tax Return (Farlen Halikman)**

Mr. Halikman stated, the tax return is included in section four of the booklet. On page one of the Form 1065 the partnership return, you will see the numbers are the same revenue numbers we had on the P&L and the expenses are the same except for one thing that is a little bit different in the tax return and the financial statement and that is because we used some accelerated methods for depreciation of assets there is \$61,000 of additional depreciation that is reported for income tax purposes that is not recorded for generally accepted accounting principles purposes and you can see that on Schedule M3 on the right hand side there is a reconciliation from the total expenses for the financial statements to total expenses for the tax return the \$61,000 is a temporary difference there.

The tax return is complete and ready to go. I don't know that we need approval for this.

#### **V. Ratification of Expenses Paid from Operating Account and Request for Reimbursement (Presenter: James Perry)**

Mr. Perry stated, item five is ratification of expenses paid from the operating account and those total \$11,535.75 and you have attached to that a listing of all the vendors and the amounts that were paid.

Member Ball asked is there anything unusual?

Ms. Hutchens stated, the only thing that is unusual is the reimbursement check that was received for the damages to the ARV was deposited into the operating account and that deposit was netted against the expense amount to keep the balance at \$25,000.

Member Ball moved to ratify the expenses paid from the operating account and request for reimbursement. Member Brown concurred and the motion passed.

#### **Staff Reports/Informational Items**

#### **VI. Consideration of Contingency Plan for Well WR-8 (Presenter Sean Stauffer and Jim Boyd)**

Mr. Stauffer stated, there has been a lot of discussion back and forth between TIFA staff about WR-8 and what our plans are. There are some things we agree on and some things that we don't agree on. The first thing we agree on is that where WR-8 is now in relation to the chloride levels we need to take some actions. We need to do something. We would like to see it get lower back closer to where it was when it first started. We took some actions with WR-9 and they seem to have worked. We reduced the flows on WR-9 and we have seen the chlorides go down. The chloride levels are closer to where the well was when it was started. With WR-8 we are not seeing that, we lowered the flow, let it rest, and the chloride levels came up in the hundreds then kind of stayed there. The two wells are not behaving the same way and just to

remind everybody WR-8 and WR-9 are located right next to each other. We were hoping that they would act the same and do the same and we didn't see that. The city's position and what we recommend is a two-step process. Step one, reduce the flow again by about 25% so we take it from about 130,000 gallons per day to about 100,000 gallons per day and monitor weekly for three months and see what happens. If that does not produce the desired results, we recommend going to step 2 and back plugging the well to try to close off any areas that is bringing in chlorides or salty water. When Jim Boyd talks, he will explain, I think, they (FWR) are ready to move forward with step 2 faster than what the city wants and that is the question at hand is how do we move forward with WR-8 and what will step 1 be. We definitely agree that we need to do something and I think today TIFA is looking for direction on where we go next with WR-8.

Mr. Boyd stated, that is a great summation of where we stand right now. I represent Miami Corp. as their engineer and have been involved with this wellfield since day one basically. I am passing out some handouts and the first two will basically provide some documentation regarding what Sean just summarized. We will go into a little bit of background on WR-8 before we get into the specifics. Well No. 8 was one of the first wells that was drilled out here and was originally drilled to a depth of about 245 feet. After they drilled it and did the geophysical logging they noticed that the conductivity, which is a surrogate for chlorides, was relatively high deeper in the well so the decision was made by the consulting hydrogeologist at the time that the well be back plugged from 245 feet back up to 198 feet below top of casing so that was done. The well was placed into operation in late October 2015 and as Sean indicated initially things were great. As you can see from the chart and the corresponding data the chlorides were bouncing around between 20 to 30, 26 to 38 milligrams per liter from the period of October 2015 through January 2016. Another thing to keep in mind too, all the wells at this point in time were being sampled on a quarterly basis so we only had data per quarter initially. We had the first quarter 2016 results and everything was fine, we got the second quarter 2016 results and it skyrocketed for Well WR-8. It went from 27 in January up to 99 in March and up to 121 in May. We actually caught this and said what's going on and it got to the point where it went to 137 in August at which point we decided that we need to take action and the well was taken out of service temporarily and it underwent an evaluation by a geohydrologist that TIFA brought in. The Colinas Group, Bob Oros, he worked with a well driller, Jeff Hausinger with Hausinger Associates who had actually drilled the Phase 1 wells. He didn't drill the Phase 2 wells. They evaluated the well. We originally thought that because they noticed the high chlorides deeper in the well before they back plugged it initially we thought maybe there was a breach in the back plug and that was the main focus of the evaluation. They couldn't find any evidence of that, they couldn't find any physical evidence of why this was occurring. The Colinas Group made the recommendation that we back off the well flow rate and see how that responded. That gets into the second handout. As Sean was indicating even though we have gone through the flow reduction since November 2016 the chloride concentrations have climbed back up into the hundreds. The latest concentration that we have, which is from a sample taken on March 9<sup>th</sup> it is up to 111. So far these flow reductions have not worked. With the concentration being up this high in the hundreds if you compare that to the other Phase 2 wells except for No. 9, which Sean talked about they are in the 20's and 30's. Well No. 8 is three to four times the concentration of the Phase 2 wells. In comparison to the Phase 1 wells, which are operating in the mid 50's it is twice so there is no question there is an issue with No. 8., We all agree we need to take action and this basically documents why.

Mr. Broome asked why would it go from 105 to 54 and then back up?

Mr. Boyd responded I think the 54 might have been a sampling error.

Mr. Stauffer stated, I think maybe something happened with the sampling, it indicates a lab error. I would hope that it was real but it would make no sense.

Mr. Boyd stated, the second handout just documents the flow reductions that have occurred so far. Originally, based on an operation schedule that was adopted in early 2016, Well No. 8 was operating at a flow rate of 260 gallons per minute, which resulted in an average (on a 12 hour operating period, which all the Phase 2 wells are operating at) of 187,000 gallons per day. So, we are talking about 100% capacity. Based on the schedule that was adopted in October 2016 we reduced the flow to 215 gallons per minute corresponding to 155,000 gallons per day, roughly 83% of its original capacity. Another thing to keep in mind for these flow reductions in No. 8 and No. 9, we are not just losing that flow, what we are doing is shifting that burden to the other wells, so it is important to keep in mind that as we reduce the flow in Well 8 we are shifting the burden to other wells, which so far hasn't had any deleterious effect but it is something to keep in mind. As shown by the previous graph this initial flow reduction wasn't working so we reduced it again based on a schedule that was adopted in December 2016 down to 180 gallons per minute, which corresponds to 130,000 gallons per day, which is 69% of its original capacity. Again, more flow was allocated to the other wells to make up the difference. That hasn't work as documented by the water quality chart.

Now we are looking at the potential of reducing it and Sean's email had said 90,000 gallons per day and that is what I used in the chart but we are looking to drop it to either 90,000 or 100,000 gallons per day, which is roughly 48% to 50% of its original capacity. Sean got to the crux of the matter. I think the difference of opinion that we have between the city and Farmton is that we think we should do something now, the reason being the flow reductions haven't worked. Even if this latest flow reduction works, we are at 48% to 50% of the well capacity, and I don't think that we should accept that without trying to do something about it and we have a window of opportunity coming up soon because Jeff Hausinger is doing another production well for Farmton and will be back onsite in mid-April. I have been coordinating with Jeff as you will see as we get into additional information. We have a window of opportunity opening up here and again I want to emphasize I don't think we should accept a 50% flow reduction without trying to do something about it, so even if the flow reduction is successful to me it doesn't matter. I think we need to do something to try to restore the well capacity. There appears to be a very clear path to do that and that is what we are going to discuss next.

Mr. Boyd distributed three additional handouts and stated, the first handout is what I'm calling the smoking gun handout. This came from the geophysical logging that was done when The Colinas Group and Jeff Hausinger evaluated the well in September 2016. This chart shows specific conductivity, which is a surrogate for chlorides. When you get down to the bottom of the casing the conductivity increases as you go to the right of the graphs, ignore above the casing that is an anomaly because it is in the casing not the bore hole., Beginning at the bottom of the casing moving downward you see the conductivity stays fairly steady, increases somewhat, stays fairly steady and when you get to about 180 feet below depth it increased significantly. What this indicates is the high chloride water is coming in at this depth, about 180 feet depth, so this is one piece of evidence we need to keep in mind.

The second handout, which correlates to this, is a flow log that was done during geophysical logging back in 2014 by R.M. Baker. If you look at the second page of this, focus on the green line. Please remember back when this was done the well was 245 feet deep, the green line and red line are basically deadlined and not moving as you move up the well column and flip

to the second page until you get to about 181 feet below casing all of a sudden the green line starts moving to the left, moving to the left means we have flow occurring. There is essentially no flow in this well below 181 feet. When you get to that depth all of a sudden the flow picks up. When you correspond it with the conductivity chart we think that is where the high chloride water may be coming in. From this depth as you move up to the bottom of the casing you can see we have flow throughout the column which varies. The third handout is a physical look at what is going on right there. We had a video taping too and this is a video shot that was taken at an elevation of 178 feet and what we need to know is that since this video was done the well site has been raised so there is about a three foot difference. A depth of 178 below top of casing back then corresponds to a depth of about 181 feet now because we went up three feet. If you are watching the video you can see the flow jetting through those cavities that are shown. We think that is the culprit, that is what we need to try to seal off. You do that by back plugging the well further. This last handout is a proposed plan and I'm recommending today that we adopt a plan for restoring the well capacity but the big consideration, and I know the city is concerned about this, and it should be, is by sealing off these flow cavities where we think the higher chloride water is coming in we are going to reduce the production of the well. The big question is can we seal this off and still have a viable well in terms of production. That is what we need to find out and there is a way to do that and that is in the last handout.

We are going to look at the proposed restoration plan now. As I mentioned previously Jeff Hausinger with Hausinger & Associates is going to be back on site around mid-April and is going to be here for 30 to 45 days drilling a well for Farnton north of here and he is available. I have been in contact with him and have been consulting with him on how we go about approaching this and we have come up with a three stage approach. My hope would be that if there is agreement that the managers would consider approving this restoration plan in principle with the understanding that it would be subject to revision based on review and input by city staff, and we may want The Colinas Group look at it also. I have already discussed this with Bob Oros at The Colinas Group and he is in agreement that this is a good thing to try to address this issue.

The first stage would be to temporarily backplug the well with silica sand and the reason we want to do that is because there was concern expressed by the city that if we went ahead and used bentonite, which is the best thing to use if you really want to seal it off, the city was concerned if you did that and if this experiment didn't work, we would run the risk of perhaps not being able to get that bentonite back out of there to the extent that we wouldn't have compromised the well. There is a way to address that risk by using a silica sand sealant that without question can be removed and get the well capacity restored back to where it was. Based on how we would go about this, we shut down the well, pull the pump, backplug the well from the bottom, which is 198 feet below top of flange to about 170 feet and that is designed to seal off that production zone that we are concerned about. We reinstall the well pump, disinfect it, once we have done that we go through an experimentation phase where we look at the well drawdown versus pumping rate, can we pump enough water out of this well once we seal off that high chloride production zone? We can run different rates and another thing we need to keep in mind is this well right now is pretty productive. We only have 4 to 6 feet of drawdown right now. We could live with a lot more drawdown. For example, Well 411, we have 14 feet of drawdown and it is doing just fine. Let's say originally the 260 gallon per minute pumping rate we had five feet of drawdown if we are pumping 260 GPM at 14 feet of drawdown to me that is not an issue so we have that going for us. We would start out with the lowest flow rate we can

start at, measure the drawdown, see how far we could take it and if at that point we say it is a dry hole and that production zone was the only thing we had going for us then we stop and go back and evacuate the well and go to plan C whatever that is going to be. If it is successful then we proceed on, we pump the well to get it clear, we redisinfect it, do bacteriological sampling, put it back online and run it. Jeff is going to be here 30 to 45 days and I want him to do this when he first gets here so we will have a 30 to 40 day period to evaluate the well. I'm suggesting we take chloride samples twice a week during this time period. We are going to know if we can have a productive enough well and we are going to know where the chlorides are pretty fast and 30 to 45 days is plenty of time to determine whether this will work. We go through that stage of evaluation and hopefully it has worked. Stage 2, we bring Jeff back out before he is ready to leave Farmton, shut down the well, pull the pump, he comes in and evacuates the silica sand, doesn't need a drill rig to do that, he can use a boom truck and reverse air. If it was successful we would go to Stage 3, which is putting back in bentonite this time, and if not, we would just go through the same process as we did under Stage 1 to put the well back in service, disinfect it, go through all the steps to get it back online and then do what we do now. Hopefully, we will be at Stage 3, which means that Stage 1 worked and we have a productive well with lower chlorides and Stage 3 would be instead of using silica sand seal we would back plug the well with bentonite, which will definitely seal it off permanently. We bring it right back up to the depth we had it before with the silica sand and we will check it again make sure we are back to where we should be and then put the well back online.

I have pricing from Jeff to do all three stages, the first stage is \$2,225, second stage is \$3,000 and the third stage is \$1,225, so if we go through all three stages with Jeff we would be spending approximately \$6,500. These are budget prices based on unit pricing, he has assumed how many sacks of silica sand he is going to need, how many sacks of bentonite he is going to need, how long it is going to take to evacuate the temporary back plug so we would be paying him on a per unit basis. If it comes under what he estimates we would pay less, if it came in over we would pay more, but we feel these are definitely good estimates.

Just to reiterate my opinion, we shouldn't accept a well at 50% production rate without trying to fix it. I think there is a clear path to fix it, we have an opportunity to fix it coming up in the next month and in my opinion we should try because the best case scenario we are back to a well at its original production rate with low chlorides. Worse case scenario we are back to where we are today. That is what I suggest the managers consider doing after any discussion, perhaps approve this plan in principle with the understanding that it would be subject to revision based on evaluation by city staff and whoever else you want to have take a look at it. We have a month to fine-tune the plan.

Member Ball stated, I want to hear Sean's input to your presentation but you are referring to a well driller named Jeff. Where is he located?

Mr. Boyd stated, his office is in Parrish in Manatee County and he is the owner of Hausinger & Associates. They are the well drillers that did the Phase 1 wells that we had zero problems with. Last year they drilled five wells for Farmton Services, two production wells and three monitoring wells. Farmton Services is bringing him back to drill another production well in April, but he is a busy guy. We may not get him back this year because he is busy and this is costing TIFA less money because he is going to be here. If he is in South Florida and we have to bring him back it is going to cost more. This guy is good, he does excellent work, he is very knowledgeable. I think Sean can attest that the city has been very pleased with his performance. The reason I think we should do it now is if we went with the city plan and reduced the

production down again to roughly 50% and it worked, I still don't think we should live with that. I think we should try to fix this and we have an opportunity coming up soon to attempt to do that. I'm not guaranteeing it is going to work. We may back plug it and it may be a dry hole and then we are going to have to figure out something else. We may have to live with a well that is at 50% reduction.

Mr. Brome asked didn't we get a hydrologist that we go to for an opinion?

Mr. Boyd stated, I just mentioned it, I have already discussed this, not in great detail, but I have discussed this at some length with Bob Oros with The Colinas Group who is the independent hydrologist. He thinks it is a good idea and we can confirm that with him between now and mid-April.

Mr. Stauffer stated, we have also spoken with BFA and I was talking to Jim about this earlier in that we have made the first few steps towards getting a hydrologist, TIFA needs one, the board needs one rather than one partner contacting directly with a hydrologist they can report to you and we need to get that together. As far as my opinion on the plan it looks like a great plan and we talked to BFA they agree too that back plugging is certainly one of the methods to go to. I still think that we have time, I don't think we are at critical mass right now and that is why I would like to see what happens with additional flow reduction. That is why I proposed that from the numbers we have seen we are not pleased at their level but I'm also not seeing upward trends. That is why I would still like to take a go slow approach and see what we get at 50%. I'm not sure what we would lose.

Mr. Broome asked if you do the low flows for three months and the chlorides come down does that mean you have to continue that low flow or slower flow to maintain the low chlorides? It is not a three month fix and you can go back, right? You are going to have to maintain a certain productivity.

Mr. Stauffer stated, you are right, Jim brings up a very good point, are we going to have an asset out there that only works at 50% and is the board satisfied with that.

Mr. Broome stated, I'm curious what the difference in productivity is to go down to a slower flow to reduce chlorides versus loss productivity by back plugging at a higher.

Member Ball stated, you are reducing, if I understand it correctly, your available productive area by back plugging.

Mr. Broome stated, which is the same thing with a lower flow. What is the difference?

Mr. Boyd stated, maybe instead of 50%, we get to 75% and we gain 25%, hopefully we get it back to 100%. We won't know until we try.

Mr. Broome stated, I was curious with the two methods if they both work with a slower flow what do you lose in productivity versus what you are losing from back plugging.

Mr. Stauffer stated, the other thing that Jim has brought up is that we will reduce the flow and that will also increase the draw down but increased draw downs could also encourage more salt water intrusion.

Mr. Boyd stated, we have a well operating right now at 14 feet and it is doing just fine.

Mr. Stauffer stated, we have No. 9 that sits right next to No. 8.

Mr. Boyd stated, I know, there is no guarantee. One thing I have learned working with wells is that there are no guarantees. I have had wells 50 feet apart that have behaved completely differently, it is just amazing.

Member Ball asked do we really know what is going on here? Do we really know what the source of it is?

Mr. Boyd stated, the evidence indicates it is right there at that depth because this conductivity chart is telling us that, the spiking right there is the smoking gun in my opinion.

Mr. Broome asked your chart from 2014 showed it at 180 so why didn't they back plug it?

Mr. Boyd stated, I'm not quite sure why they didn't go ahead and back plug it further.

Member Brown asked is having the two back plugs in that well going to cause any future issues?

Mr. Boyd stated, no it shouldn't. Again, in my opinion, even if the latest proposed flow reduction works, I don't think we should accept that. I think we should try to fix it, I think there is a clear path to try to fix it. It is worth trying. At the money we are talking about I think we should try to restore the well as close as we can to its original capacity because then we are not going to place that burden on our other wells, which so far have taken it just fine but over a 20 year period, who knows.

Mr. Broome asked if the members were interested in getting a formal opinion from a hydrologist, how long would that take, and how expensive would that be for an independent to weigh in with his opinion on these alternatives?

Mr. Stauffer stated Bob Oros has always been very responsive. There have been other times he has done a letter report. I would say a couple grand and a week or two.

Mr. Boyd stated, that would be my guess.

Member Ball stated, I think I would like to give Sean a little time on his approach to reduce the pumping and gather some more data on this. I would rather not rush into an action here but I think the plan probably makes a lot of sense so I would like to get another opinion. I would like to suggest that the sense of urgency is maybe not to pull the trigger today to accept this plan as not to necessarily approve it in principle, I don't think I want to take an action other than to support Sean's desire to want to gather a little bit more data before taking the next step to plug the well. If I understand it correctly there is risk associated with that too even though you might be able to undo it.

Member Brown stated, I think there may be some middle ground looking at the two different plan proposals as I understand them right now. The one thing that continues to concern me is the possibility of the long term implications of the rising chlorides. If we don't see a trend in the proper direction within a 30 day period I'm not sure why we would do that additional 60 days. Maybe we look at this reduced rate for 30 days but at some point I have a wellfield, I have a land base that is attached to this well and that is my key concern that is if we don't see the trends that we do take action at that point.

Member Ball asked what is the cost of increasing the number of times we monitor or test?

Mr. Stauffer stated, it is about \$300 per test, maybe a little less because right now we are up there every Wednesday doing stuff so it is convenient for us to take a sample while the guys are there so that shift from monthly to weekly we really didn't see much of an increase. To go have separate trips to get up there and sample it may be \$150 a week extra probably.

Member Ball stated, I understand the guy is here, but I don't think I want to make a decision just based on a window that is only 30 to 45 days, but I agree if we continue the monitoring you were saying three months maybe we don't have to wait three months to get a trend line that tells us.

Member Brown stated, we are getting better or we are not getting better.

Member Ball stated, but 30 days might not be enough.

Member Brown stated, I will leave that to the experts.

Member Ball stated, I'm not an expert either.

Mr. Stauffer stated, in 30 days we will have another meeting.

Member Ball asked why don't we defer action on this until the next meeting. I'm willing to have a special meeting. I will come any time to deal with this.

Member Brown asked are we saying we will increase our testing over that 30 day period?

Mr. Stauffer stated, those are the costs associated with it. I will get with our maintenance staff and see if that is something that they can do. I know we have lost a lot of people recently. That would give us four data points and maybe I can get them to turn around the testing a little faster right before the meeting.

Member Ball asked why don't we shoot for five if we can? You were suggesting twice weekly, are you going to see that much difference with that pacing of it?

Mr. Boyd stated, we only have four weeks between when we do the first stage and the second stage. I would like to see more than four data points during that very critical period where we are evaluating how the back plug worked.

Member Ball stated, I don't think it is really a question as to whether if we are not seeing an improvement we are going to have to go to the next step, but the reduced flow at least gives you a non-invasive period of time to get a better handle on what is going on. If it does at the reduced flow take care of the chloride level then I know that may still be a consideration do we accept a well that is operating at 50% capacity, do we bump it up to 60% at that point and see what happens? There is still some tweaking before we have to make that permanent decision.

Ms. Hutchens stated, another consideration is you are putting additional stress on the rest of the wellfield by reducing the flow of WR-8 because you are moving that flow from WR-8 to the other wells in the system.

Member Ball stated, but we may be doing that anyway even with the plug.

Mr. Stauffer stated, I also want to remind everybody that these two wells are at the center of the wellfield so they compete with the other wells so when we talk about having issues or chlorides you are going to find that in the center because the cones of influence overlap here so they are going to be more sensitive in the center than they would be on the outside. I know we talked about data points and periods and I'm looking at after we shut WR-8 off we brought it back online and I have some data points here and a week apart we showed a change in chloride levels of 30 milligrams per liter of an increase from one week. You can see it went from 65 to 104 so it makes me think that this is a quickly reacting system, just evidence to see how pumpage changed for the well and how that relates to a chloride change.

Member Ball stated, if I'm understanding it and it is absolutely possible that I'm not, is that if we see a stabilization even if it is somewhat higher than the other wells that could be an acceptable condition. I think the issue is whether the chlorides just keep climbing and then you have to try to do something to plug that.

Mr. Boyd stated, to me and from a holistic stand point, I would be concerned about and I don't know the answer to this question, but in the long run having a well that is sucking high chlorides in, what is that going to do to the overall wellfield over time? Are we inviting some event that is going to manifest itself over time by continuing to pump this well and having this inflow of high chloride water? That concerns me. I can't quantify it but from a common sense standpoint that concerns me.

Mr. Stauffer stated, to address that concern we have the salt water monitoring wells out there and we have those set much deeper, they are the canary in the coal mine. They are there to show changes before the chlorides get to production wells.

Mr. Boyd stated, I agree with you in theory but in practice that wasn't the case. This happened, and having those saline wells didn't tell us anything about this.

Mr. Stauffer stated, right, they are the ones that talk about the overall health of the wellfield as a whole that is what he was talking about. Clearly WR-8 is an anomaly. I know your concern is nobody wants a wellfield to salt up and we end up going somewhere else, that is the last thing, but I think that is what those wells are there for. One of the things during my discussion with BFA they said you might want to think about putting a deep salt water monitoring well here because then it would be in the center of pumpage.

Mr. Boyd stated, we have to go back and look at that. On the modeling that was done, I think there was more of a drawdown closer to Wells 1, 2, and 3 because we are getting more drawdown in that area but we can go back and look at that. You could be right that may be the center of where those cones were.

Member Ball stated, let me suggest that I think it was understood that there was going to have to be some more discussion about this anyway before it gets absolutely set in sand. I think there is enough uncertainty that on technical issues that usually are best left to technical experts. I still don't hear a very precise consensus on what is going on and what needs to be done. I prefer to get a little more data and probably a month doesn't impact our options too heavily or the condition of the well so I would like to see us get more monitoring data, maybe if Sean can pick up five points before we meet again, have some more dialog amongst our technical folks including our hydrologist consultant to see if they want to come back to the next meeting and we need a report of what they have been able to find out and where we are and here is what we think to go forward options are and we can make a determination. I'm not comfortable acting today on a definitive plan.

Member Brown asked David are we comfortable with that approach?

Mr. Fuechtman stated, it is not exactly what I want to do, what Jim presented is what I want to do, but at the end of the day I think it is what we are left with and we will take a look at the results after one month and hopefully it does work but if it doesn't then hopefully, Jeff and his crew will be available with our approach.

Mr. Stauffer stated, they are planning on coming up anyway.

Mr. Boyd stated, they are going to be here if we want to use them and we want to give ourselves enough time to evaluate how the back plug works. I want them to do this when they get here. I was hoping the decision would be made by mid-April whether they are going to proceed or not. I think if you go ahead tomorrow and reduce the flow down to where you want to, we will get five data points as Member Ball suggests. I think five data points are going to be plenty and you are going to know. I agree with you it reacts quickly.

Mr. Stauffer stated, it shows that it reacts quickly. It didn't take a year for it to go from 39 to 104, it took a month. That means that whatever the influence is it happens immediately.

Mr. Boyd stated, we will know if that worked and in the interim we could vet this plan as you said through a third party that I agree with completely and the only point of emphasis in my mind, in my opinion, is even if it does work, I would still try to fix the well. Even if the well is producing lower chlorides at 50% pumping rate I don't think we should accept that. I think we should try to fix it to get it back to where it should be. To me that probably remains a point that there may be some disagreement about amongst the partners.

Member Ball stated, I would certainly like and I don't think we are going to get it today but I would like to have the options on the table and understand what the risks are with each option.

Member Brown asked do we need action to authorize The Colinas Group to proceed with review of this plan and have their opinion by our next meeting?

Mr. Stauffer stated, that would be great.

Member Ball moved to authorize staff to engage The Colinas Group to evaluate the options and to have an opinion by the next meeting. Member Brown concurred and the motion passed.

Mr. Boyd asked, your reducing the well chlorides is operational, and doesn't need any sort of management directive?

Mr. Stauffer stated, just operational.

Member Ball stated, the minutes will reflect what our judgment was to request that the city proceed per this approach to work to get us five data points by the time we meet the next time and to reduce flow the way Sean has recommended it be reduced and vet the plan that Jim Boyd proposed. It seems to have a lot of logic and sense behind it. I just would be more comfortable if we gather as much additional data and get as much additional information on the options and risks to make a decision at our next meeting.

Member Brown asked what are we pumping that well at now?

Mr. Stauffer stated, about 130,000 gallons per day.

Member Brown asked you are going to 100,000?

Mr. Stauffer stated, yes.

## **VII. Update on Rail Trail Project (Presenter: Andy Jantzer)**

Mr. Jantzer stated, for the rail trail project this past month we have seen the first substantial construction activity where the city has gone and raised our pull boxes and basically the process that has been set up by the general contractor is they replace them back to lime rock sub-base and establishes the elevation of the pavement then the city field ops goes in and excavates and raises the pull boxes so it is 1 ½" above that lime rock sub-grade elevation. Then the contractor goes back in and recompacts the lime rock around the pull boxes and then they are clear to proceed with paving. That is the process that is set up for the first couple mile section that is going to be their initial paving in the areas occupied by the water main and duct bank. We have issued a suggestion to the contractor that they consider letting us go in earlier if they could provide us with the elevations and stake out elevations for where the pull boxes need to go to have the city go in and raise the pull boxes before the lime rock is placed we could probably do it in half the time. They may have their reasons for wanting to do it their way, minimize damage to the pull boxes or other things so we are leaving that decision to the contractor it was just our suggestion.

The other relevant issue is the status update, they are clearly running behind schedule, there is still no Corps of Engineer permits that were expected before the turn of the calendar year. We are looking at a situation where the contractor is behind schedule probably facing the potential for liquidated damages. That is always a construction management challenge when we have a lot of our facilities involved with the project as well. We continue monitoring to make sure all the facilities are protected as it goes along.

Mr. Boyd asked, when you raise the pull box, is there is enough slack in the conduit that it is easily done and there is not an issue?

Mr. Jantzer stated, yes. If you look at it from a section the conduit comes up one end, crosses over and comes up the other end there is actually a bit of space for adjustments to be made to raise the pull box and change the angle a little bit. We have electronic services people reviewing it making sure there is no damage done to the fiber optic because it is pretty susceptible. That is being watched as well.

### **VIII. Area IV Phase 2 Update (Presenter: Sean Stauffer)**

Mr. Stauffer stated the painting is finished. Jim put together a punch list of some items for Felix to fix, some minor stuff but I don't think they provided a schedule for that.

Mr. Boyd stated, no, we are going to have to get back with Mr. Miller. We need to encourage him to complete the punch list.

Mr. Stauffer stated there is nothing huge on the punch list.

Mr. Boyd stated, the main thing was the leaking check valve and for most of the wells it wasn't leaking hardly at all, but on the wells that were leaking they couldn't get it painted properly, particularly Well No. 1, it is rusted because they couldn't fix it in the first place so that is what he needs to understand. Because we were rushing on the last day we couldn't completely verify that we had complete paint coverage. There were several spots where they didn't get the final coat on and you could actually see there is one spot they missed and it is already rusting. They have to come back out and fix that. I think their performance on the wellhead replacement, then subsequently on the wellhead painting, I think they have done great., Once we talked them into it, they have gone into this wholeheartedly. I think they have done a very good faith effort. We definitely need to appreciate that.

### **Other Business**

Mr. Stauffer stated, at the last meeting we had talked about setting some general policy about what we do with long term contracts with consultants and we have a couple consultants that work with us and we had decided at that meeting to go ahead and award three-year contracts and then to add additional years up to two years each year if we are satisfied with their performance. Based on the performance of one of our contractors we have decided to rebid our wetland monitoring contract and we will be putting the bid package together and have that before the board shortly. This will be the second time that we have bid it out so we have all the documents I just need to reissue and get new prices.

### **Public Comment**

### **Next Scheduled Meeting**

The next meeting will be April 20, 2017 at 11:30 a.m.

## **Open Items**

## **Adjournment**

Member Brown moved to adjourn the meeting at 12:43 p.m. Member Ball concurred and the meeting adjourned.