SOUTH JORDAN CITY
CITY COUNCIL WORK MEETING

March 5, 2013

Present: Mayor Scott Osborne, Council Member Mark Seethaler, Council Member Chuck Newton, Council Member Brian Butters, Council Member Steve Barnes, Council Member Larry Short, CM John Geilmann, ACM Gary Whatcott, City Attorney Rob Wall, Assistant City Attorney Ryan Loose, City Engineer Brad Klavano, City Council Secretary MaryAnn Dean

Others: Marv Allen, Tyler Allen, Richard Bay, Alan Packard, Linda Petersen, Chris Rogers

4:00 P.M. WORK SESSION

EXECUTIVE CONFERENCE ROOM

NOTE: "NO MOTIONS OR ACTIONS WILL BE TAKEN DURING THIS MEETING"

Mayor Osborne welcomed everyone present. He offered an invocation. Council Members Short and Newton were not present at this time.

I. TRAINING

None.

II. MAYOR AND COUNCIL ITEMS FOR REVIEW AND DISCUSSION

None.

III. STAFF PRESENTATIONS AND DISCUSSION

A. Reuse Water Presentation *(By Marv Allen, Consultant)*

Marv Allen gave a presentation on reuse water (Attachment A).

Both Council Members Newton and Short arrived during the presentation.

Mr. Allen said at some point, the option of reuse will be more cost efficient than it appears today. As the cost of water increases and they become more desperate for water sources like California, it will become a more viable option.

Mayor Osborne asked if the costs are coming down based on advances in technology? Did they consider the option of doing a project like this in 10 years versus today? Mr. Allen said as current water supplies become more costly, this type of project will be more competitive. He said it will be 20 years before they will see that.

Mayor Osborne asked what is the total cost per acre foot of water delivered going through an R.O.? Mr. Allen said $1000, on average. He noted that without Jordan Valley Water Conservancy District, the cost would increase to $1600 an acre foot. He said when the actual facilities are paid off it decreases the cost to $550 an acre foot, but that does not assume replacement costs for a new facility.

Council Member Seethaler asked what would Mr. Allen do, if he were making this decision? Mr. Allen said, as a South Jordan resident, he does not want to have to pay $1500 an acre foot today. He said he previously served on the city's secondary water committee. The City Council faced the same decision; it is difficult to convince people to pay more today to save tomorrow. The crossover point for secondary water was 9 years. He said it would be difficult to assume the city would move forward with the RO process and pay significantly more for the next 20 years. He said at some point, it may be more cost effective. That is where California is today.

Council Member Seethaler noted that in the next 35 years, they are projecting the JVWCD rates to increase 7 times what it is today. Is that likely? Richard Bay, JVWCD, said the projections are good. He said there is no current project funded or approved by the Board for water reuse. He said in the long term plan, there is a plan for water reuse for 15,000 feet, to be done in the next few decades. It is yet to be determined if the member cities will do the project, or if it will be done by JVWCD as a regional project. He said he assumes that project will be with a secondary water source and could be anywhere in the southwest salt lake valley.

Council Member Seethaler asked if there are other alternatives to consider? Mr. Allen said South Jordan is not in a good position regarding ground water because of the contamination problems and aquifer conditions. It is unlikely that they will see a ground water project for South Jordan. When they look at other options, they come back to secondary water. The City has made some efforts with their secondary water system. He feels they should continue to pursue that option. The issues with secondary water are that people don't like the quality of water. As water gets more expensive, people will be more willing to put secondary water on their lawn or they will consider xeriscaping.

Mr. Bay agreed with Mr. Allen. He said they have to manage their demand and continue with water conservation programs. He said the city needs to understand JVWCD water supplies, and continue to have a voice with JVWCD. He said after the 40 year remediation project, 90 percent of the sulfate will be removed. The remaining 10 percent will take the rest of the century. After that, the projection is that there will still be 800 parts per million of total dissolved solids in the water. The city will then have to decide if that's okay for their residents. If not, there would be a need to blend, demineralize, or look at reverse osmosis. He also suggested that the city look at secondary water.

Council Member Newton asked why are the JVWCD increases necessary at this time? He asked, if the city moves forward, would that relieve some pressure on JVWCD? Mr. Bay said yes, it would remove some pressure. They are watching the rate increases carefully. In the 10 year plan, they are watching inflation and the real cost for growth. He said right now, their reliable water supply is 100,000 acre feet per year; their demand is around 90,000 acre feet per year. They are actively developing 2 additional water supplies. He said most of their costs are already known. He said the projection is 4-5 percent increase each year for 10 years. That is the floor, not the ceiling. He noted the further water conservation reduction that is still needed to help with their demand.

Council Member Newton asked if they figured out the total cost savings versus the overall project in the future? Mr. Allen said that is the area under the curve in the graph. He noted that there will be a need to set aside additional money for replacement costs. Council Member Seethaler asked if this technology will reduce in cost as there is more use and demand? Mr. Allen said it could. He noted that the high energy costs won't go away.

Council Member Newton asked about the size of piping needed down 10200 South? Mr. Allen said 24 inches initially, but it would go down to 12 inches by the reservoir. Council Member Newton asked about increasing the pipe size to allow for the increase in the summer months. Mr. Allen said treatment plants are very expensive. To design the plant for summer peak is inefficient.

They discussed piping along the canal road. Mr. Allen said his recommendation is to put the pipe in below ground, along the canal road. Council Member Short asked about putting the pipe in the canal. Mr. Allen said there is a huge cost in covering the canals. Mayor Osborne indicated that the canal company would not give approval to pipe through the canal. Mr. Allen indicated that it is difficult to find places to put utilities when they cannot use concrete corridors.

B. 10200 S. Jordan Valley Easement Between 3200 W. and Bangerter Highway

City Engineer Klavano gave some background on this project, and said staff has been working with Mayor Osborne, Council Member Newton, and JVWCD on this project. He said they have looked to see if they can move the easement to the north to free up some room on the individual lots. JVWCD feels that they could move the easement 20 ft. to the north, if some concessions were made financially and moving utilities around. He showed a drawing outlining the current easements. He said there would be some additional costs to JVWCD. He said there is a 12 inch water line that needs to be relocated; that project is in the city's 5 year CIP. There is a phone and gas line that need to be moved. He estimated the total cost to be $750,000, $500,000 of which will be born with the water project. He said there is about $231,000 that the 18 lot owners would have to bear. He noted that those property owners got a discount on their lots when they bought them because of the easements. He said the next step is to meet with the residents.

Council Member Newton said the residents basically have three choices; they can donate the land to JVWCD and relieve them from paying the property tax on the project. The 18 effected properties can share the cost for this project, or everyone in the development could share in the cost because currently the entire subdivision has to pay a monthly assessment to maintain that property. Because the subdivision fee is only $280 a year, the payback for the neighborhood would take a significant amount of time.

Mayor Osborne said JVWCD said they will take over the property, but that would require every property owner to deed back property that is mortgaged at this time. They discussed reverting back to a smaller right of way that may decrease the cost a little. The property owners were discounted $22,000 a lot at the time of purchase. Mayor Osborne said it is in the property owner's best interest to pick up the rest of their lot.

Council Member Barnes asked if they would require 100 percent approval or 80 percent approval from the residents to purchase the additional property? Mayor Osborne said they need to set a threshold, and if they meet that, everyone would have to participate. ACM Wall said the law lays out what the thresholds are for a special service district. ACM Whatcott noted that they are not making improvements; they are moving an easement. Because the residents are paying for their own improvements, is the process different? City Attorney Wall said he would do more research to see if this meets the requirements for a special service district. If it doesn't, the process might be more of a financing mechanism.

The City Council discussed the need to have rules in place and waivers to be signed.

The City Council indicated that they are okay with presenting these numbers to the residents to see how they feel about moving forward. The numbers will not be presented until they know the

legal process that would be required. City Attorney Wall said he would give a ruling on this issue at the next City Council meeting.

C. Preliminary Budget Discussion *(By Finance Director Naidu)*

This item was not discussed.

D. Processing of Council COLA Paperwork *(By Government Services Director Cunningham)*

This item was discussed in conjunction with item F.

E. Updated Key Management Practices *(By Government Services Director Cunningham)*

This item was not discussed.

F. Council Retirement Benefits *(By Government Services Director Cunningham)*

Chief of Staff Cunningham said the City Council had a previous discussion if the city wanted the option of contributing an amount to the council member's 401K accounts that equals the amount paid for the 2 council member's contribution to their retirement accounts. He said the Utah Retirement System has indicated that they have no legal problem with that. URS did have a problem doing that for people that are covered.

Mayor Osborne said everyone should have equal pay for their service. They need to take the politics out of it and get it finished. CM Geilmann said it will need to be voted on at least one time. Council Member Barnes said it will be political, no matter what. Mayor Osborne agreed, but said it will then be over with.

Council Member Barnes asked about his case, where he is on the dental plan. He said the city probably pays a contribution for that. Is that included in their compensation package?

Mr. Cunningham said they can include the health insurance component, if the City Council wishes to do so. Council Member Seethaler said employees get paid the same, regardless if they choose the city's health or dental plan. He said he is okay with individuals making a choice regarding their medical insurance benefits. It was noted that the retirement percentage is 18.03, and the health insurance share is a 50/50 split on premiums. Mayor Osborne said they need to get to uniformity. Mr. Cunningham said the easiest way is to match the current contribution for the

URS system, and that has the cost of living built in. He said they could state in the Ordinance that there would be an equivalent 401K contribution to match the URS contribution.

Council Member Seethaler asked if this will have a common effect with the Mayor? Mr. Cunningham said yes.

Mr. Cunningham said regarding the COLA, they have been giving the City Council the option every year to decline the increase and it has to be signed on their personnel action form. He suggested that from now on, an email be sent to the City Council indicating that a COLA increase will go into effect on a certain date. Unless the City hears from that City Council member, the COLA increase will affect the City Council member. The paperwork will still be done, but no signature would be required. That process is similar to the other city employees.

ACM Whatcott said there is a need for a signal light at 5600 West by the new middle school. The agreement is to share the cost 50/50 with Herriman. The total cost of the project is $76,500. City Engineer Klavano said it is in next year's budget. They need to keep this project going. ACM Whatcott said if they wait to sign the agreement until after the budget is approved, they won't be able to get the parts ordered.

The City Council concurred for staff to move forward with this traffic signal project.

The work meeting was adjourned.

ADJOURNMENT

Council Member Barnes motioned to adjourn. Council Member Newton seconded the motion. Vote was unanimous in favor.

This is a true and correct copy of the March 5, 2013 City Council Work meeting minutes, which were approved on March 19, 2013.

Anna M. West

South Jordan City Recorder

South Jordan City

Direct Potable Reuse Project Study

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Presentation Outline:

- Direct potable reuse versus indirect potable reuse.
- Status of direct potable reuse projects.
- Status of indirect potable reuse projects.
- Issues impeding direct potable reuse.
- Status of reuse regulations.
- Potential treatment methods.
- Treatment of Utah Lake water.
- Proposed alternatives for development of reuse water from the JBWRF.
- Cost estimates and cost comparisons.

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Direct Potable Reuse versus Potable Reuse

- **Indirect Potable Reuse:** Involves the use or reclaimed water to augment surface water that is used as a drinking water source, or to inject reclaimed water into surface water or ground water where it would pass through some sort of environmental buffer (Disguise).

- **Direct Potable Reuse:** Injection of reclaimed water directly into a potable drinking water system.

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Status of Direct Potable Reuse Projects

No direct potable reuse projects in the United States.

Only **one** location in the world with a documented direct potable reuse project.

- *Project is located in **Windhoek, Namibia,** an extremely arid country with little water resources.*
- *Has been used since 1968*
- *Reclaimed water is mixed with other sources at a ratio of 35% reclaimed water and 65% other sources.*

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Status of Direct Potable Reuse Projects

City of Denver Potable Reuse Demonstration Project 1985 to 1992

Purpose of this project was to examine the feasibility o converting secondary effluent from a waste water treatment plant or water of potable quality for dirct use in a potable water system.

While the demonstration project was highly successful, there has been no movement to implement a direct potable reuse project in Colorado.

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Status of Indirect Potable Reuse Projects

Practiced currently within the US and other parts of the world

Singapore

- Reclaimed water undergoes advanced treatment, then mixed and blended with raw water.
- Mixed water undergoes a process of naturalization before being treated again in conventional water works to produce drinking water.

Goal: 15% of total daily consumption by the year 2012.

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Status of Indirect Potable Reuse Projects

Orange County

- Reclaimed water undergoes advanced treatment, then is discharged into sea water barrier injection wells.
- Purified water mixes with other sources, such as ground water, percolates through aquifers, then eventually becomes part of the Orange County drinking water supply.

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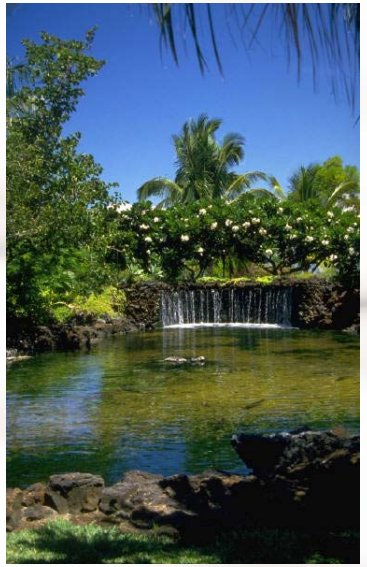
Status of Indirect Potable Reuse Projects

City of San Diego-Water Purification Demonstration Project



- Purified water through advanced treatment will be used to augment the City's surface water supply in the San Vicente Reservoir. Water is blended with existing water supplies.
- Water will remain in reservoir for approximately 1 year – natural transformation

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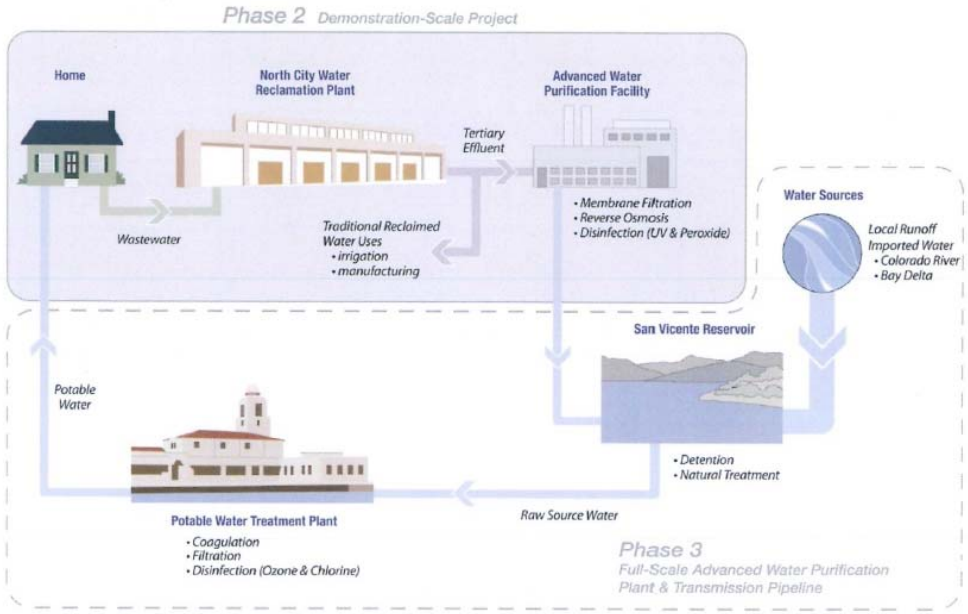
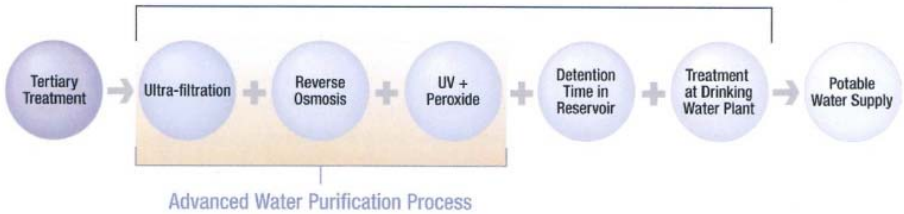


Multi-Barrier Water Treatment Steps



HANSEN ALLEN & LUCE inc ENGINEERS	SAN DIEGO WATER PURIFICATION DEMONSTRATION PROJECT ADVANCED WATER PURIFICATION PROCESS	FIGURE 1

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Issues Impeding Direct Potable Reuse

Public Perception

- Understandable reluctance to the direct consumption of water that once contained human waste, regardless of the extent of water purification that has taken place.
- Even though “de facto” indirect potable reuse occurs in many parts of the US, there is still a reluctance to accept direct potable reuse.

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Issues Impeding Direct Potable Reuse

Technological Capabilities

- Regulatory agencies want to be assured that the system is fail-safe.
- Can be overcome through a multi-barrier approach and reliable real time monitoring throughout the process.

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Issues Impeding Direct Potable Reuse

Cost

- Required levels of treatment and redundant processes (multi-barrier approach) are extremely costly when compared with many existing sources.
- As existing sources become exhausted, and more expensive sources of water must be pursued, direct potable reuse treatment costs will become more favorable.

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Issues Impeding Direct Potable Reuse

Health Concerns

- Advances in analytical techniques for trace inorganic and organic constituents have raised questions regarding the potential health impacts from these trace constituents.
- Arguments suggest that direct reuse should be postponed until potential impacts from these trace constituents can be better understood.
- Similar concerns can be raised regarding conventional treatment methods.

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Status of Reuse Regulations

A. **Current regulations throughout the US prohibit direct potable reuse of treated wastewater.**

B. **California is the most progressive due to limited conventional water supplies.**

   i. Senate Bill 918, passed in September of 2010,

      1. Bill requires the California Department of Public Health to adopt uniform water recycling criteria for indirect potable reuse for ground water recharge by the end of 2012.

      2. Bill further requires CDHP to develop and adopt uniform water recycling criteria for surface water augmentation by the end of 2016.

      3. Bill requires CDHP to investigate the feasibility of developing regulatory criteria for direct potable reuse and to provide a final report on that investigation by the end of 2016.

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Potential Treatment Methods

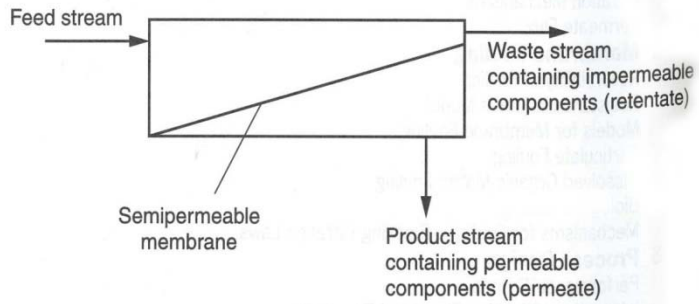
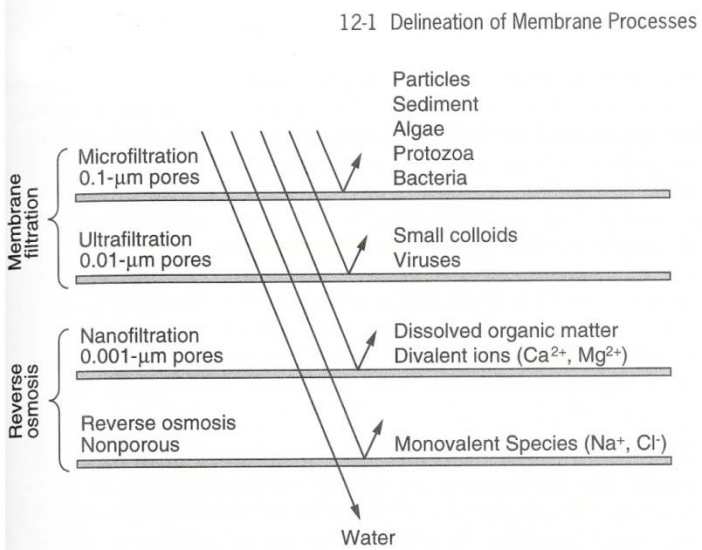
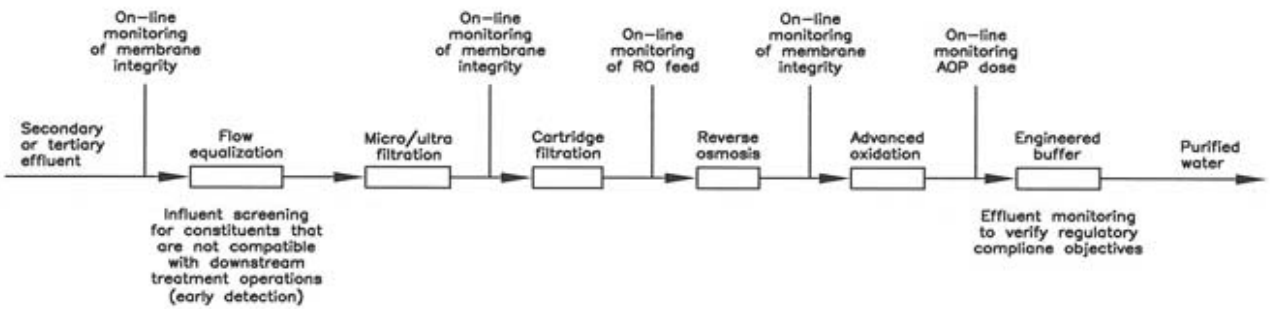


Figure 12-1
Schematic of separation process through semipermeable membrane.



Potential Treatment Methods (cont)

A. Water Reuse Research Foundation and Water Reuse California suggest a flow treatment scheme similar to that of Orange County.



i. Suggest providing an engineered buffer for flow retention and quality assurance, such as a reservoir where water could be stored for a 24-hour period to allow testing prior to discharge into the potable water system.

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Potential Treatment Methods (cont)

B. Jordan Basin Water Reclamation Plant treats its water to a fairly high quality, using a membrane bioreactor (MBR) treatment process. They report that it is of a quality that could be introduced directly into the RO process.

C. Can anticipate a 20% byproduct flow from this process that must be taken all the way to the Great Salt Lake.

D. After the RO process the water will be highly demineralized, and may need to be re-mineralized for public health concerns (i.e. absence of magnesium and calcium), to enhance taste, and to prevent downstream corrosion. Balancing can be accomplished through re-carbonation and addition of trace minerals and salts, or by blending with other water supply sources.

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Utah Lake Water

A. Water is highly mineralized, and would have to pass through an RO type process to reduce TDS, etc.

B. JVWCD conducted a study in 1999 to investigate treatment of this water.
   i. Due to high solids and microbial content of this water, advanced pretreatment prior to the membrane demineralization process was determined to be required.
   ii. Studied microfiltration and ultrafiltration for this pretreatment process.
   iii. Feed water recovery during the pretreatment process was determined to be in the 78% to 81% range (i.e. produced a by-product on the order of 20% that must be wasted).
   iv. Total by-product for both pre-treatment and RO would be on the order of 36%.
   v. Disposal of this by-product water would have to be to the Great Salt Lake.

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Utah Lake Water

C. Other issues with use of this water:
   i. State Engineer will most likely not approve a change application that would allow the City to use the water year round instead of just during the irrigation season.
   ii. Transport of the water from Utah Lake during the winter period. Again State Engineer will not allow the withdrawal from the Jordan River during the winter period as winter flow water in the river is fully allocated.
   iii. Reliability of supply through existing canals.

D. Due to these issues, treatment of Utah Lake Water was dropped from consideration.

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Proposed Direct Reuse Alternatives

A. **Looked at alternatives for most cost effective use of water.**
   i. Year round use to make most efficient use of the treatment plant.
   ii. Most effective corridor or path where the largest quantity of water could most effectively be introduced into the South Jordan potable water system.
   iii. 102nd South Corridor.
      1. Tanks 1B, Zone 2 Tank, Zone 3 Tanks, Tank 5A (serving zones 4 and 5) and Tank 6A along this corridor.
      2. Can serve 50% of Pressure Zone 1, 100% of Pressure Zone 2, 100% of Pressure Zone 3, 50% of Pressure Zones 4 and 5, and approximately 85 to 90% of Pressure Zone 6.
   iv. Sufficient undeveloped land for the treatment plant adjacent to Tank 1B.
   v. Indoor use only because it is a more uniform year round quantity that is more compatible with designing the least cost treatment plant. Most favorable condition.
   vi. Indoor demand for this alternative – Total 10,590 ac-ft – build-out. Assumed build-out conditions today as most favorable condition.

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Proposed Direct Reuse Alternatives (cont)

B. Evaluated two options for development of direct potable reuse water.

i. Option 1 – 6.3 MGD RO Treatment Plant

1. Based on South Jordan's portion of supply from the JBWRF.
2. Supply by 2030 to be 5.231 MGD
3. Assuming 80% product water, and 20% by-product water from the RO plant, the RO plant would produce 4.185 MGD product water. Assume 4.2 MGD production from the plant. This would produce 4,254 ac-ft of water over a 330 day period, assuming plant could be down for one month out of the year for maintenance.
4. Plant must have a redundant treatment train to meet Drinking Water Regulations. Assuming 3 treatment trains, two for production and one for redundancy, the plant must be a 6.3 MGD Plant.

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Proposed Reuse Alternatives (cont)

5. Water would be mixed with JVWCD water at the plant at approximately 40% RO plant water to 60% JVWCD water to produce the total indoor demand of 10,590 ac-ft, discharged by gravity into Tank 1B, and pumped to Pressure Zones 2 through 6.
6. Description of piping systems.
7. Pump stations:
    a. Booster pumping station at JBWRF.
    b. Booster pumping station at the RO Plant to Zone 2 and Zone 3 tanks.
    c. Booster pumping station at Tank 3 to Zones 4 and 5 Tank and Zone 6 tank.
8. By-product pipeline to the Great Salt Lake.
    a. Kennecott indicated that they do not have capacity in their waste pipeline.
    b. Kennecott indicated that we could get a similar easement along the canal and through their property as JVWCD obtained.

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Proposed Direct Reuse Alternatives (cont)

ii. Option 2 – 12.8 MGD RO Treatment Plant Option

1. Assumes that Riverton or some of the other entities that have water from the JBWRF are not interested in using that water and that South Jordan could obtain a little over double their allotment to develop a larger reuse project. .
2. Supply assumed at to be 11.814 MGD
3. Assuming 80% product water, and 20% by-product water from the RO plant, the RO plant would produce 9.451 MGD product water. Assume 9.5 MGD production from the plant. This would produce 10,642 ac-ft of water over a 330 day period, assuming plant could be down for one month out of the year for maintenance.
4. Plant must have a redundant treatment train to meet Drinking Water Regulations. Assuming 4 treatment trains, three for production and one for redundancy, the plant must be a 12.8 MGD Plant.

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Proposed Direct Reuse Alternatives (cont)

5. Water would not be mixed with JVWCD water at the plant, but would be used directly into the potable water system to meet all of the indoor demand of 10,590 ac-ft, discharged by gravity into Tank 1B, and pumped to Pressure Zones 2 through 6.
6. Description of piping systems.
7. Pump stations:
   a) Booster pumping station at JBWRF.
   b) Booster pumping station at the RO Plant to Zone 2 and Zone 3 tanks.
   c) Booster pumping station at Tank 3 to Zones 4 and 5 Tank and Zone 6 tank.
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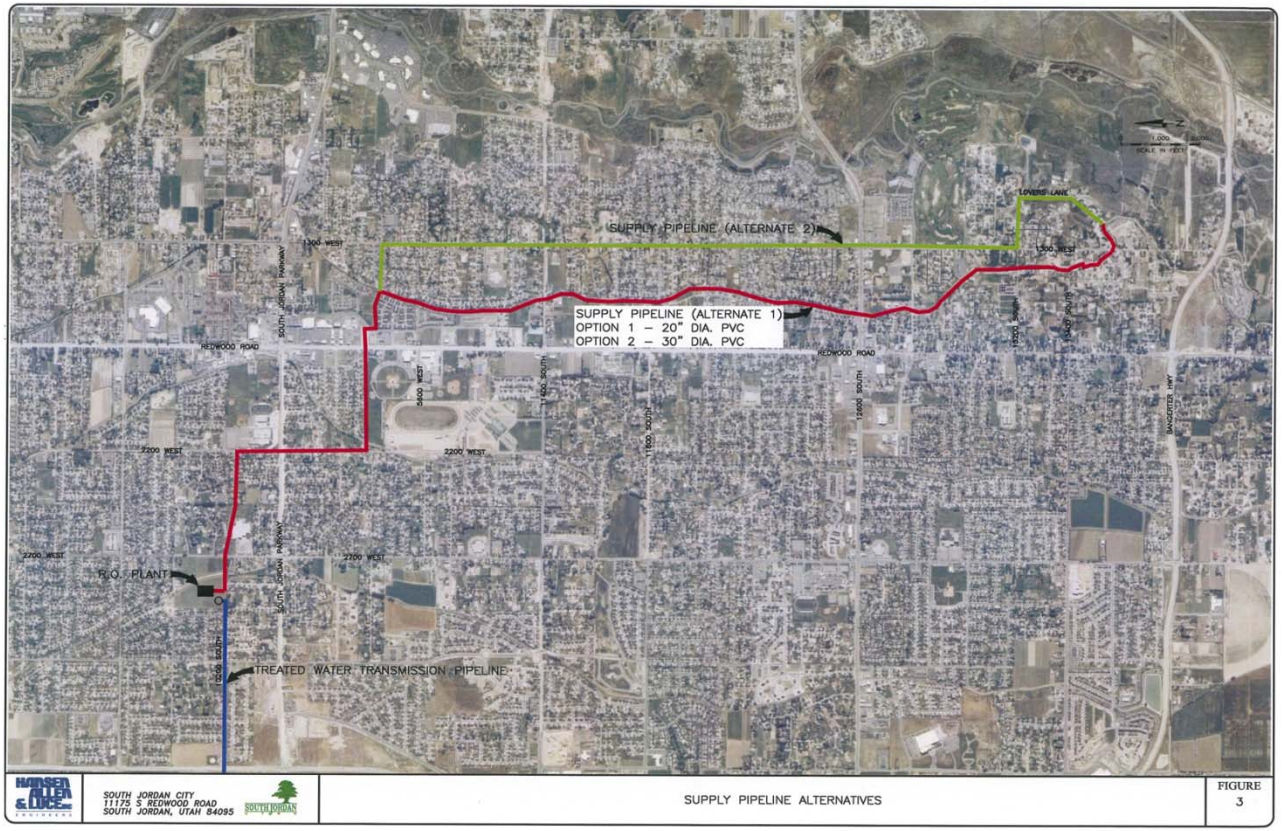
Proposed Reuse Alternatives (cont)



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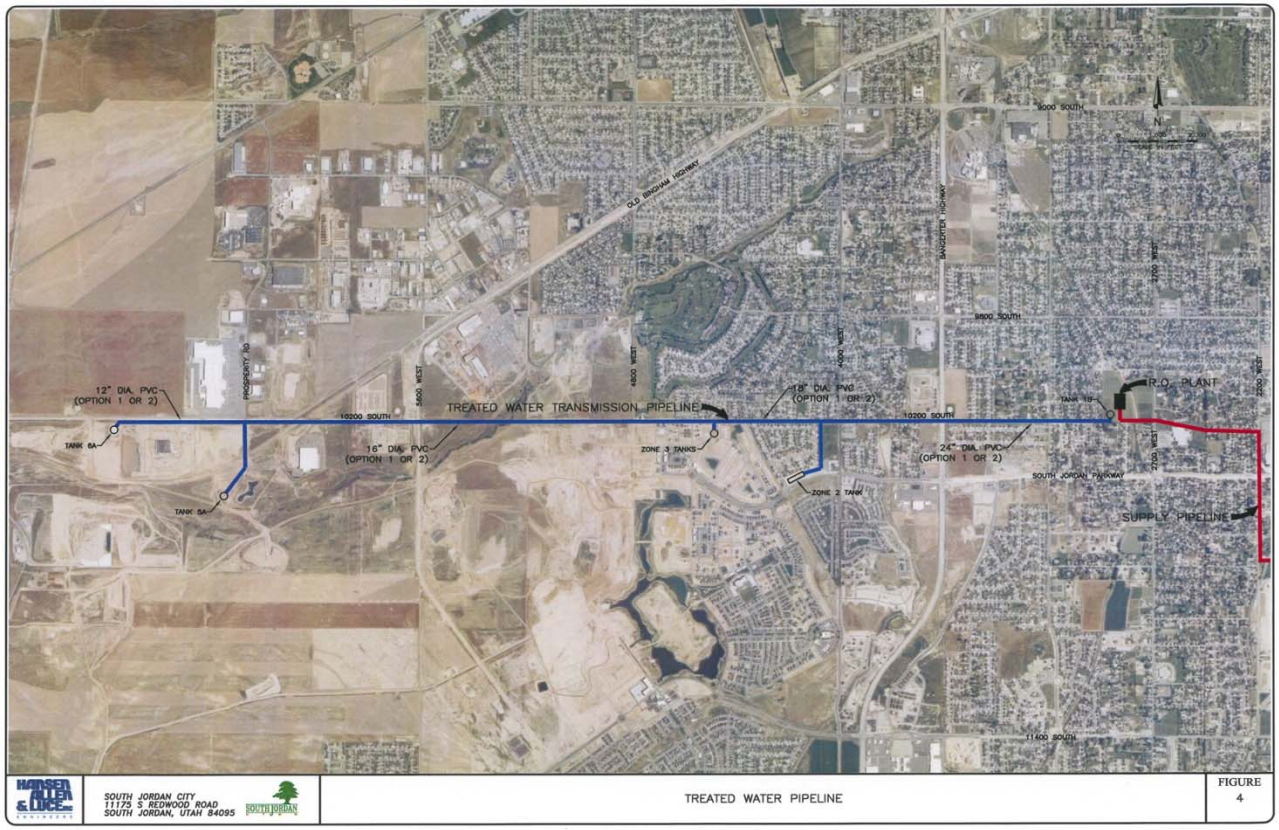
Proposed Reuse Alternatives (cont)



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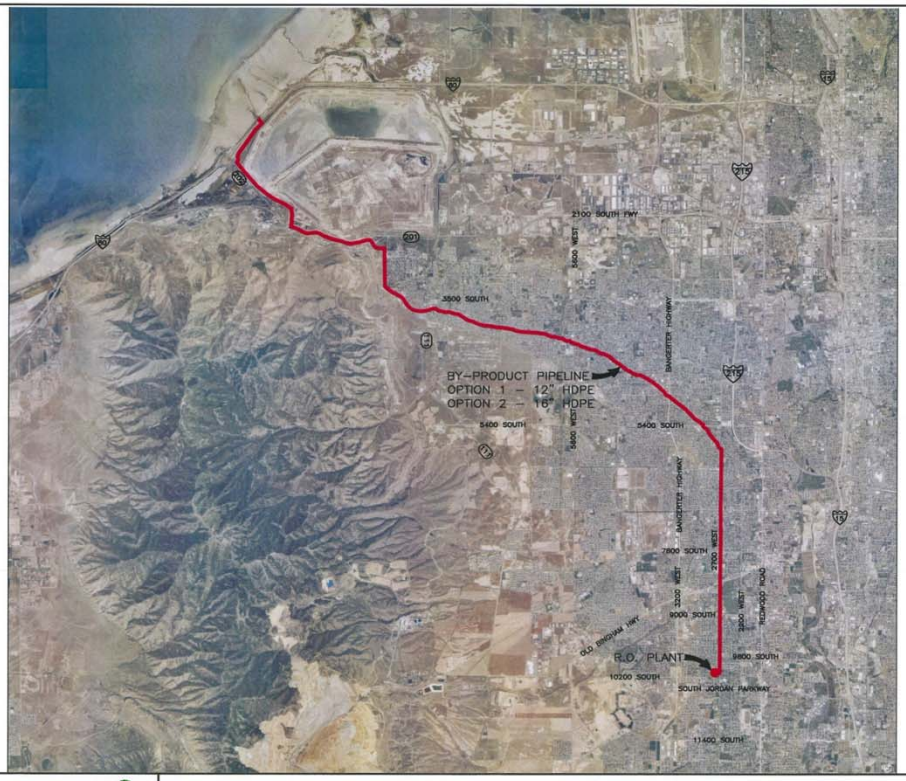
Proposed Reuse Alternatives (cont)



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SOUTH JORDAN CITY
11175 S REDWOOD ROAD
SOUTH JORDAN, UTAH 84095

SOUTH JORDAN

BY-PRODUCT PIPELINE

FIGURE 5

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Capital Facilities Costs

Option 1 – 6.3 MGD RO Treatment Plant

PIPELINES:	Construction	Contingency	Engineering	Total
	Cost	15.0%	15.0%	Cost
1. Supply pipeline from JBWRP - 20"	$4,275,138	$641,271	$641,271	$5,557,679
2. Transmission Pipelines from RO Plant	$2,985,061	$447,759	$447,759	$3,880,579
3. By-Product Pipeline - 12"	$11,669,742	$1,750,461	$1,750,461	$15,170,665
			Total Pipeline Cost =	$24,608,923
R.O. PLANT:	$31,520,000	$4,728,000	$4,728,000	$40,976,000
PUMPING STATIONS:				
1. S. Jordan's Portion of Pump Station at JBWRF	$1,002,000	$0	$0	$1,002,000
2. Pump Station at R.O. Plant	$1,000,000	$150,000	$150,000	$1,300,000
3. Pump Station at Tank 3	$800,000	$120,000	$120,000	$1,040,000
			Total Pump Station Cost =	$3,342,000
10 MG STORAGE TANK:	$7,000,000	$1,050,000	$1,050,000	$9,100,000
			TOTAL CAPITAL CONSTRUCTION COST=	$78,026,923

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Capital Facilities Costs

Option 2 – 12.8 MGD RO TREATMENT PLANT

	Construction	Contingency	Engineering	Total
PIPELINES:	Cost	15.0%	15.0%	Cost
1. Supply pipeline from JBWRP - 30"	$7,115,886	$1,067,383	$1,067,383	$9,250,652
2. Transmission Pipelines from RO Plant	$2,985,061	$447,759	$447,759	$3,880,579
10. By-Product Pipeline - 12"	$15,828,700	$2,374,305	$2,374,305	$20,577,310
			Total Pipeline Cost =	$33,708,541
R.O. PLANT:	$52,060,000	$7,809,000	$7,809,000	$67,678,000
PUMPING STATIONS:				
1. S. Jordan's Portion of Pump Station at JBWRF	$1,002,000	$0	$0	$1,002,000
2. Pump Station at R.O. Plan	$1,000,000	$150,000	$150,000	$1,300,000
3. Pump Station at Tank 3	$800,000	$120,000	$120,000	$1,040,000
			Total Pump Station Cost =	$3,342,000
10 MG STORAGE TANK:	$7,000,000	$1,050,000	$1,050,000	$9,100,000
			TOTAL CAPITAL CONSTRUCTION COST=	$113,828,541

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Annual Operation and Maintenance Costs

A. OPTION 1 – 6.3 MGD RO TREATMENT PLANT

FEATURE	O&M COST
RO Plant	$220/ac-ft
Pumping Stations	$6/ac/ft
Annual Pumping	
JBWRF to RO Plant	$32/ac-ft
RO Plant to Zone 2 Tank	$19/ac-ft
Zone 2 Tank to Tank 3	$13/ac-ft
Tank 3 to Tank 5A	$26/ac-ft
Tank 5A to Tank 6A	$11/ac-ft
RO Plant Filter Replacement (Capital Cost/10 years)	$475,000

B. OPTION 2 – 12.8 MGD RO TREATMENT PLANT

FEATURE	O&M COST
RO Plant	$220/ac-ft
Pumping Stations	$6/ac/ft
Annual Pumping	
JBWRF to RO Plant	$32/ac-ft
RO Plant to Zone 2 Tank	$19/ac-ft
Zone 2 Tank to Tank 3	$13/ac-ft
Tank 3 to Tank 5A	$26/ac-ft
Tank 5A to Tank 6A	$11/ac-ft
RO Plant Filter Replacement (Capital Cost/10 years)	$950,000

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JVWCD Costs

Rates by Zone:	2013 Summer	2013 Winter
	$/ac-ft	$/ac-ft
Zone 1	$ 440.53	$352.42
Zone 2	$ 440.53	$352.42
Zone 3	$ 481.92	$393.81
Zone 4 & 5	$ 500.46	$412.35
Zone 6	$ 500.46	$412.35

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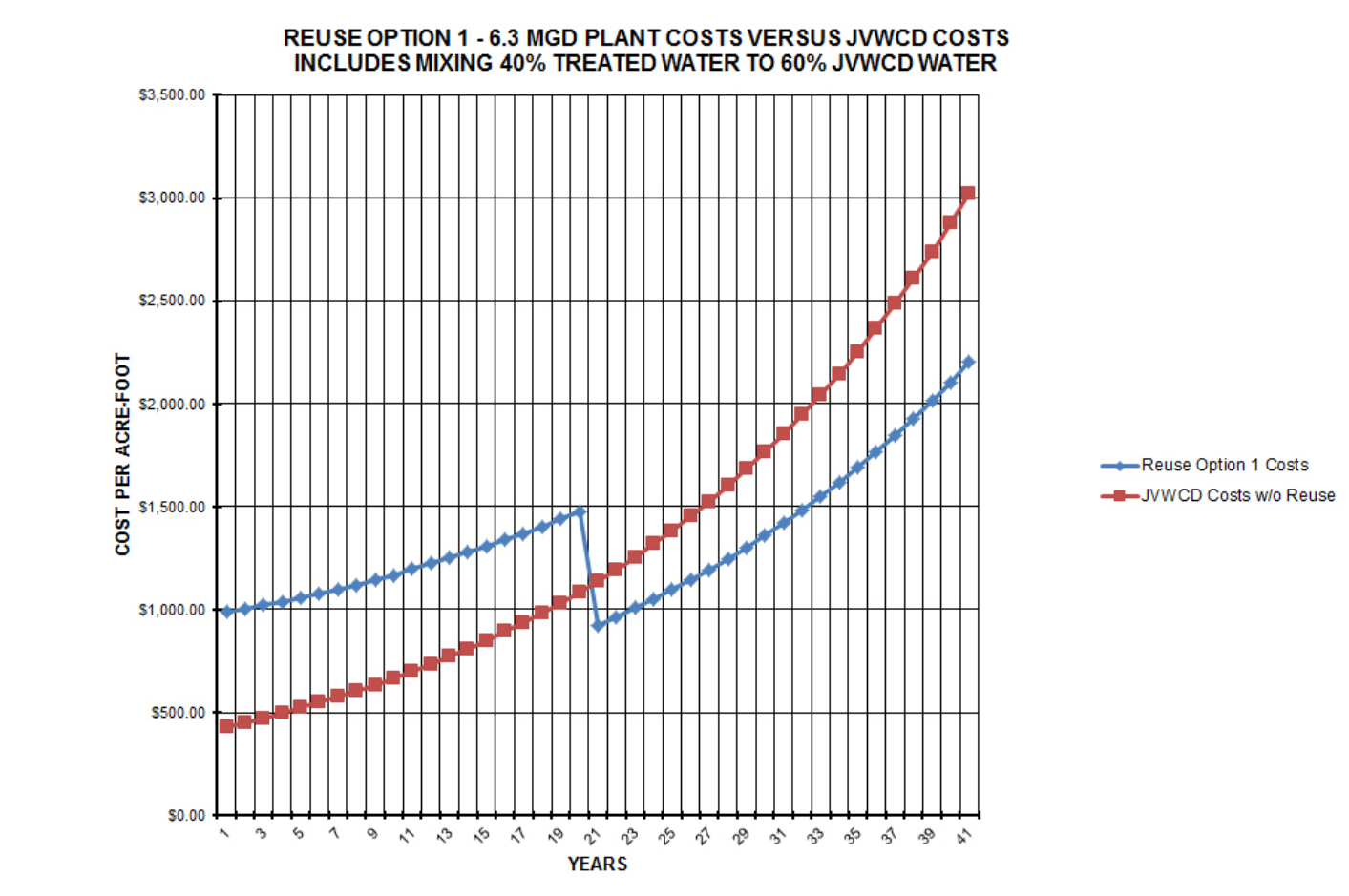
Cost Comparison: Reuse vs. JVWCD

A. Option 1 – 6.3 MGD RO Treatment Plant



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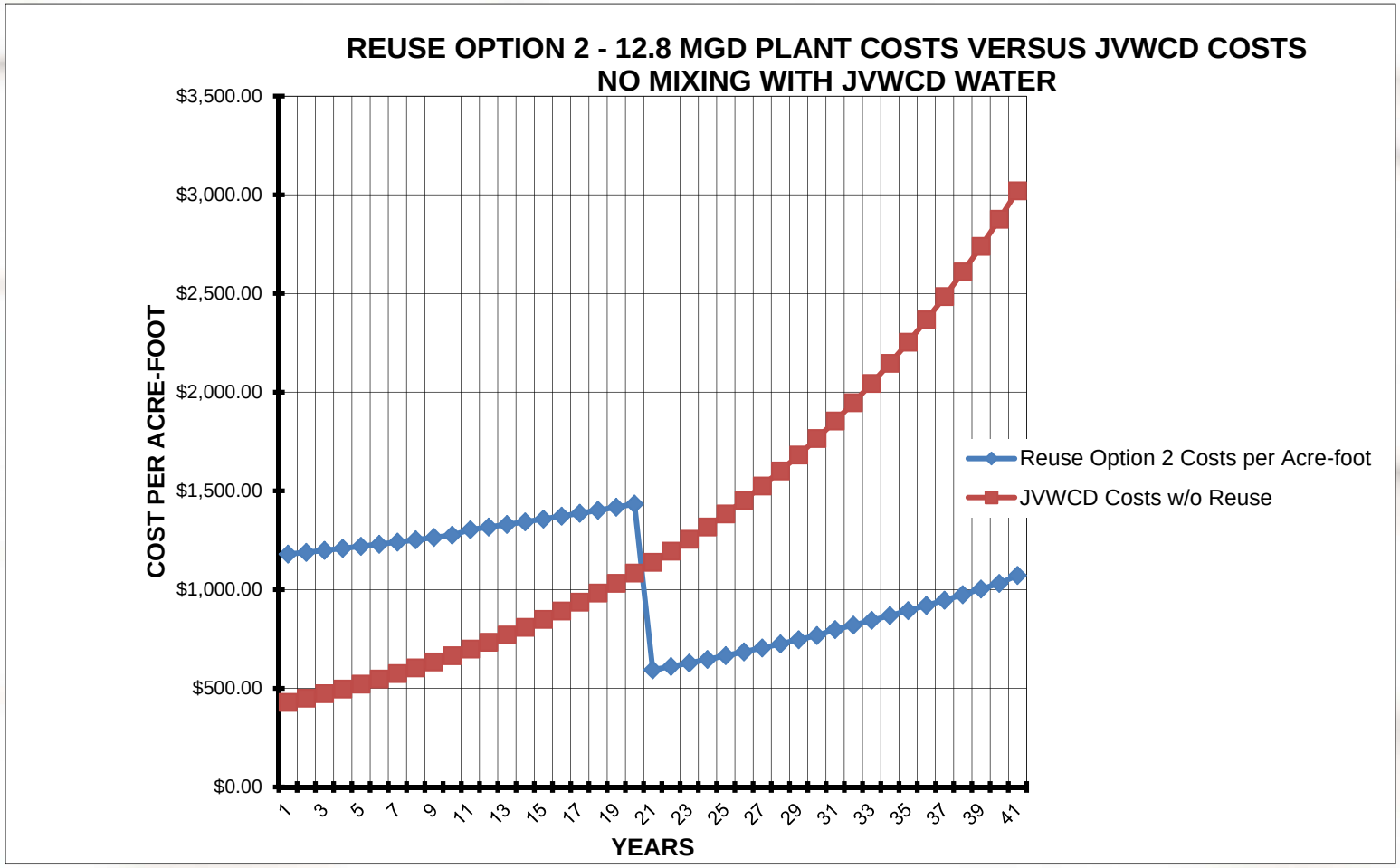
Cost Comparison: Reuse vs. JVWCD



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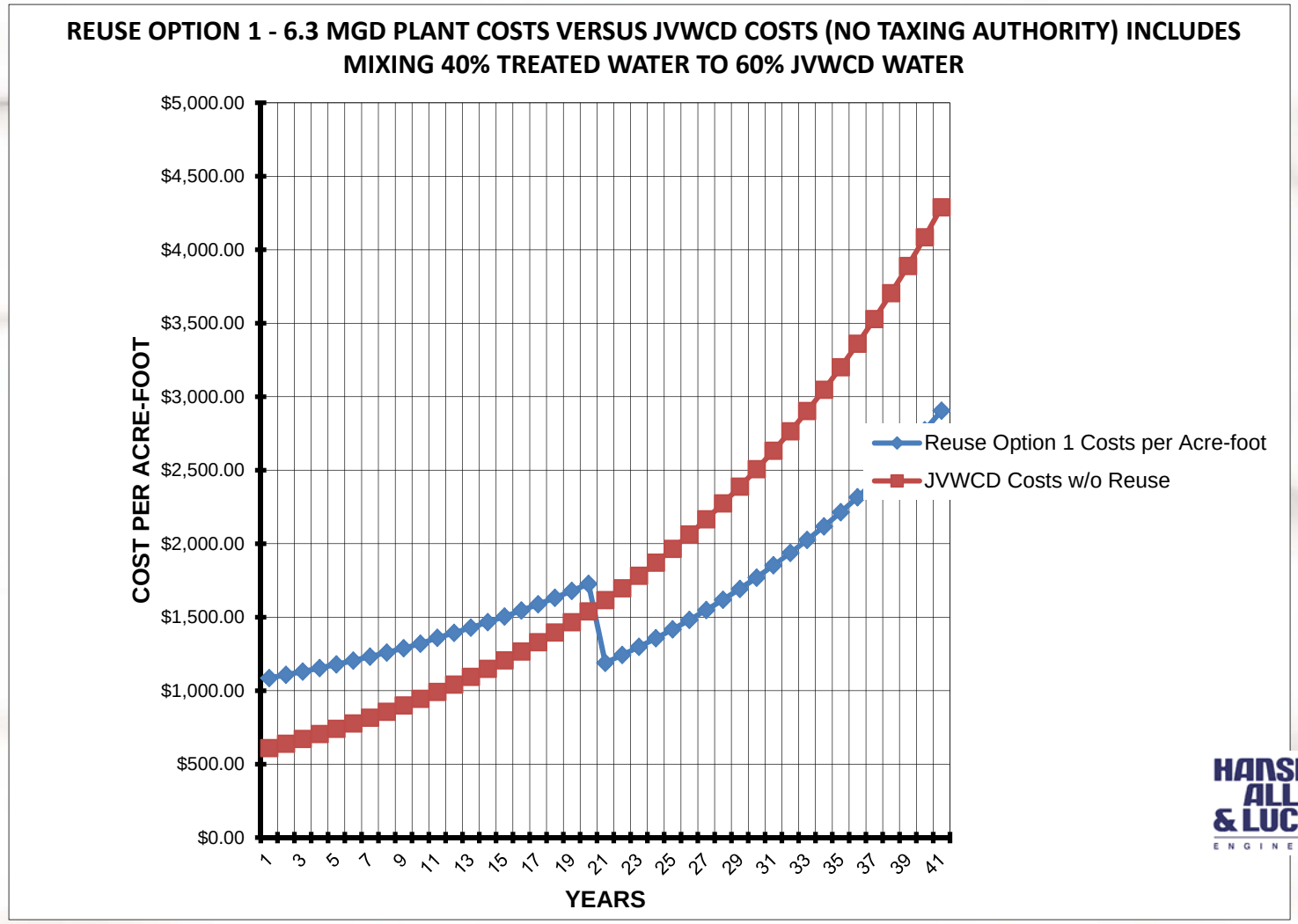
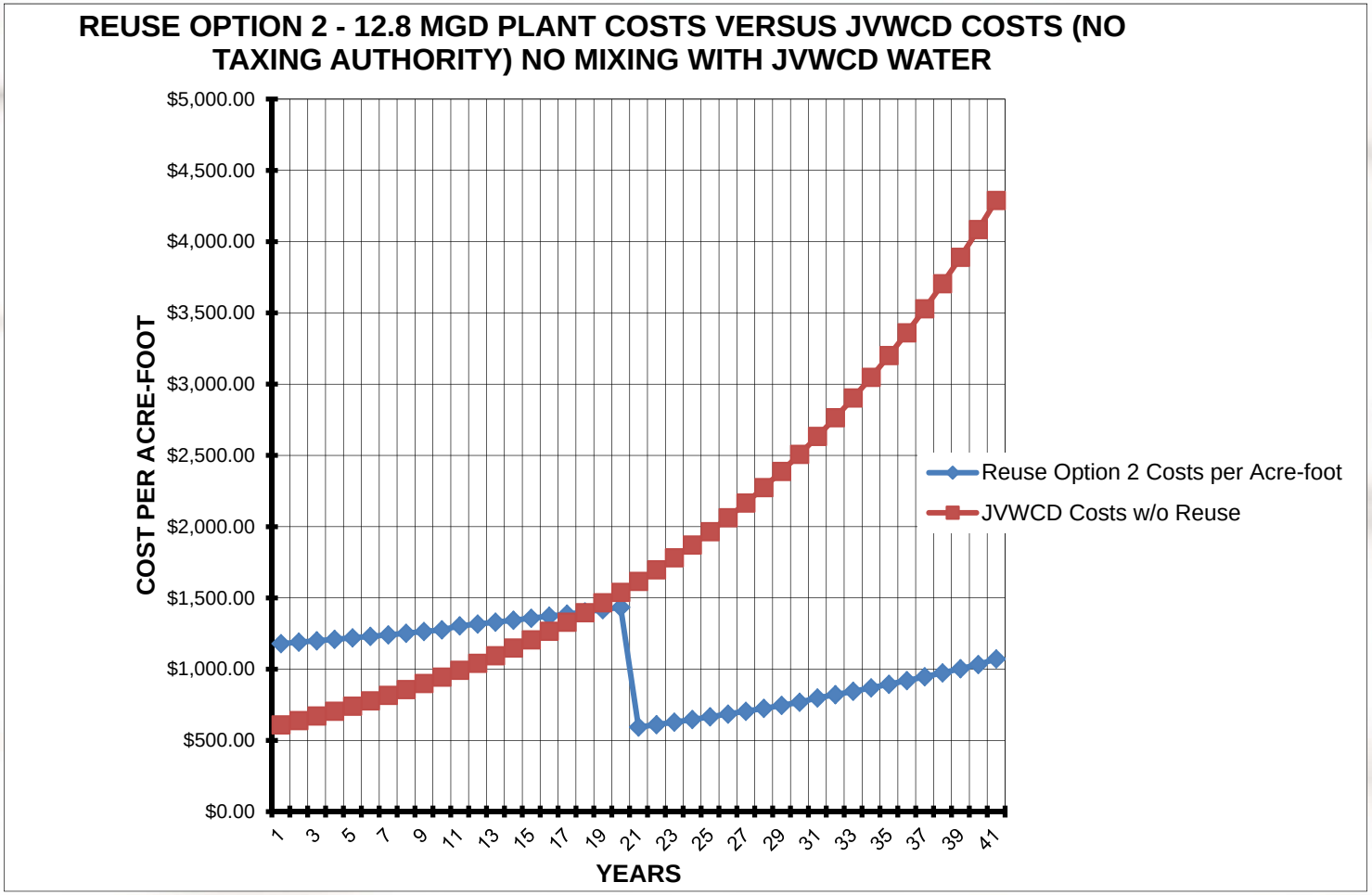
Cost Comparison: Reuse vs. JVWCD



Cost Comparison: Reuse vs. JVWCD



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Thank You

Questions?

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