



MURRAY CITY MUNICIPAL COUNCIL COMMITTEE OF THE WHOLE

The Murray City Municipal Council met as a Committee of the Whole on Tuesday, December 13, 2016, in the Murray City Center, Conference Room #107, 5025 South State Street, Murray Utah.

Council Members in Attendance:

Blair Camp, Chair	District #2
Diane Turner, Vice-Chair	District #4
Dave Nicponski	District #1
Jim Brass	District #3
Brett Hales	District #5

Others in Attendance:

Ted Eyre	Mayor	Jan Lopez	Council Administrator
Janet Towers	Chief Admin. Officer	Jennifer Kennedy	City Recorder
Pattie Johnson	Council Office	Jennifer Brass	Resident
Blaine Haacke	Power General Manager	Frank Nakamura	City Attorney
Ben Horsley	Granite Schools	Donald Adams	Granite Schools
Craig Burnett	Police Chief	Mandy Ditto	Murray Journal
Justin Zollinger	Finance Director	Doug Hill	Public Services Director
Lesha Earl	Trans-Jordan	Mark Hooyer	Trans-Jordan
Russ Kakala	Streets Superintendent		

Chairman Camp called the Committee of the Whole meeting to order at 5:05 p.m. and welcomed those in attendance.

1. Approval of Minutes

There were no minutes for approval.

2. Business Items

2.1 Trans-Jordan Cities Update – Mark Hooyer, Executive Director

Mr. Hooyer explained that tours, educational programs and field trips play a major part in the Trans-Jordan role, consequently, Lesha Earl was introduced as the new education director for Trans-Jordan Cities.

When it comes to waste, Trans-Jordan takes its position as nexus for seven cities, in order to help those cities move in the same direction utilizing the same consistent information. The following was outlined in a brief presentation:

- **Murray by the numbers**

Among all Trans-Jordan Cities, Murray makes up 10.6% of their population. This represents about 8.1% of the total municipal waste received and is approximately 14,168 tons per year, 1.4 pounds of trash per person, per day. Compared to the national average, of 4.4 pounds per person, per day, one might say Murray is incredibly lower, however, all Trans-Jordan Cities are well below the national average for individual waste. Primarily, due to a culture that eschews alcohol, Utah provides less trash in the form of glass, from beer and wine bottles. In other communities around the country, heavy glass increases their mass in waste substantially, resulting in more weight per person.

Since a curbside green waste program is not offered, Murray contributes a little less than 3% of green waste collected. West Jordan is the only city in the Salt Lake valley, other than Salt Lake City, which provides a green waste container and is producing about 10,000 tons of green waste.

- **The Bicycle Collective**

As an avid cyclist and disturbed with bicycle waste, Mr. Hooyer wanted something good to come from all the unwanted bicycles at the landfill. Over Memorial Day weekend, all disposed bikes were held back and set aside and a total of 75 bicycles were received. This was a regular occurrence with a majority in great shape or brand new.

Summer months provided more bikes so a true and fun recycling program has become a great reward by partnering with *The Bicycle Collective*, who collects the bikes from Trans-Jordan. Located in South Salt Lake City for 18 years, the non-profit organization resolved the waste issue, with over 700 volunteers, who flip bikes, giving them back to the community for free.

Funding for the organization comes from selling high-end bikes after restoration, as well as, block grants received from various cities and the county. A small salary is paid to mechanics who rebuild bikes and once a week 30 or more bikes are taken to the Decker Lake Youth Detention facility. Incarcerated youth are trained to become bike mechanics, through a certified program offered by *Park Tools*, which is a bicycle tool manufacturer. Once released the young people are certified bike mechanics and can find jobs using their skill. Many bikes are coming from Murray City and Mr. Hooyer felt it was celebratory, and shared a picture of the first bicycle ever donated by Trans-Jordan.

- **Debris Management Plans**

Mr. Hooyer thanked the council for their consideration to approve the very important Debris Management Plan which had been sent to them. All cities and municipalities are planning for disaster, by way of either the anticipated large earthquake or a large windstorm.

For example, five years ago in December of 2011, Davis County was hit with extremely high winds, sustained at 103 mph in Kaysville and 140 mph at the top of Francis Peak. The golf course lost 700 trees and the entire area, including Farmington suffered of problems due to wind. A picture was shared of the tremendously long line of vehicles waiting to get into the Davis County landfill, known as Wasatch Integrated Waste. Hauling debris to the landfill the next day was overwhelming when the line stretched over a mile long line of residents disposing of green waste. The landfill was inundated with over 10,000 tons of green waste due to the storm. By comparison, Davis County received over half of a years' worth of waste in just those two days, whereby, Trans-Jordan received over 24,000 tons of waste in the last year.

Additional contractors and contract companies were called upon for assistance to provide more loaders, compactors, shredders and grinders, in order to move piles and handle massive amounts of debris. Afterwards, once declared as a disaster area, Davis County was eligible for Federal Emergency Management Agency (FEMA) grant money, however, because there was not a FEMA approved, local Debris Management Agreement Plan in place prior to the incident, the county could not get reimbursed for added expenses owed to contractors. The solid waste district was inevitably responsible for those extra expenses, which required overtime of staff and contractors for several weeks after the storm to process the massive pile of green waste that accumulated.

The city of Murray now has the agreement in place, in order to avoid the expense that Davis County had to endure. The plan allows Murray to bring green waste, due to an event or emergency, out to Trans-Jordan, whereby, the cost for handling, moving, trucking and hauling the debris will be reimbursed by FEMA. Not only green waste, but debris, such as, concrete, rubble from construction demolition, pipes and electrical wire, are included in the agreement. The debris would only be stored on their property and managed to the best of their ability until it can be properly disposed of.

- **Trans-Jordan New Waste Cell Construction**

A photo was shared of the latest active solid waste cell recently constructed at Trans-Jordan, known as Cell 6A, which will be ready to come on line after the flooring was finished. Considering the current rate of growth, the current cell is expected to last another four to five years until it reaches its capacity. An unexcavated piece of hillside, near the current cell was pointed out, representing the next cell to be utilized and would actually be the last cell to be excavated in February or early March.

The cost to build 6A was a little over \$1 million, which included the EPA mandated geo-composite liner, the thick, white HDP plastic sheeting, and a black drainage system across the flooring. Another photo depicted the procedure where the cell was then layered with three feet of sand. The impressive, large-scale cell holds two and half million cubic yards of solid waste, which is equivalent to a little over two millions tons of municipal solid waste.

- **Northern Utah Environmental Resource Agency (NUERA)**

Due to growth and capacity issues along the Wasatch Front, Trans-Jordan is not the only landfill to struggle with space. Wasatch Integrated Waste Management District, (WIWMD) in Davis County, is facing a similar situation and has eight to nine years of life left at their landfill. Also, the city of Orem and the northern part of Utah County, closed landfills several years ago and are transferring waste to

the west desert, traveling 103 miles every day to Wasatch Regional Landfill. The waste comes through Murray and travels on Interstate 80 long distances because they have no space in their own vicinities.

Trans-Jordan is part of the Northern Utah Environmental Resource Agency (NUERA), which was formed as an Interlocal agency to share resources among municipal solid waste entities. Entities include: City of Logan, Weber County, WIWMD, North Pointe Solid Waste Special Service District, South Utah Valley Solid Waste District (SUVSWD), and Trans-Jordan. Together, these entities joined in the project to maintain municipal involvement and control over waste distribution challenges.

South Utah Valley Solid Waste District (SUVSWD) sold their Bayview Landfill to NUERA and bought back in, as one of the project partners, and continues to haul waste to Bayview. The North Pointe Transfer Station will haul to Bayview beginning January 2, 2017. Wasatch Integrated will haul to Bayview in eight years, followed by Trans-Jordan in 10-12 years.

Bayview was purchased for \$6,250,000 and the 25% share cost to Trans-Jordan was \$1,562,500. Trans-Jordan's budget allowed for the purchase by way of a very well prepared savings account.

Mr. Hooyer shared another perspective; the city of Logan has been building a new landfill for almost 20 years. It took nearly 14 years to site the land where complaints were minimal. After land use issues, ordinances and water quality concerns, a site was chosen far north of Logan in Clarkson, Utah, which lies near the Utah, Idaho border. The cost was approximately \$12 million and the landfill is not yet open with construction of the first cell still underway.

Once open, Cache Valley, who generates 112,000 tons of waste per year, will utilize the Logan landfill. By comparison Trans-Jordan generated 350,000 tons of waste last year. This means the new Logan landfill, will not have enough waste volume or revenue to support the very, very large investment, resulting in extremely high waste costs.

For Trans-Jordan Cities, including Murray, the opportunity exists for Bayview to be a fully operating, environmental compliant landfill, currently established and ready for operation at a price of \$1.5 million. Once Trans-Jordan landfill closes, it would guarantee landfill life for Murray for the next 50 years.

Ms. Turner wondered what Murray's portion of the \$1.5 million cost was. Mr. Hooyer, explained calculations were not made according to percentage of ownership, where Murray was approximately 10% of Trans-Jordan's population. Instead, waste transferred to Trans-Jordan would be charged equally by the ton for all cities and those who use it more, pay more. Last year, Murray transferred approximately 14,000 tons of waste to Trans-Jordan.

Mr. Hill clarified, costs were not calculated the same way, for example, as Central Valley Water Reclamation, where expenses were based on percentage of ownership. In relationship to Trans-Jordan, there is no annual fee and Murray City does not have a percentage of ownership. All revenue from municipal, residential and commercial waste funds the Trans-Jordan landfill.

Mr. Hooyer confirmed Trans-Jordan receives no tax dollars and all operational costs are born by what is received at the gate, based on weight by the ton. The seven Trans-Jordan cities pay \$14 per ton, which is the lowest rate in the entire United States for solid waste. No other facility in the country is tipping

their waste at this low price. The gate rate, for commercial haulers, servicing apartment complexes, schools, and hospitals, is \$29 and is still \$2.50 lower than the Salt Lake Valley landfill.

An aerial map of the Wasatch Front depicted Trans-Jordan's current 660 acres of landfill, along with the current cell and 190 acres for the future cell. Trans-Jordan has collected solid waste for nearly 60 years, since 1958 and contains 9.3 million tons of waste. The ideal plan would be to expand the current site into 680 acres of land, which the landfill has first right of refusal to purchase. This could provide 80 years of waste disposal solving space issues for the next century.

The new Bayview Landfill is 43 miles away, on the southwest arm of Utah Lake and would be an easy haul from Trans-Jordan, down the Mountain View corridor, bordering state road 68, known as, Redwood Road and the only neighbors are the LDS church owned farms.

The Bayview project is a win, win partnership and a great example of local governments working together to provide a shared solution to a common challenge with 80+ years of landfill life. Before Trans-Jordan begins moving waste to Bayview, the remaining space at Trans-Jordan will need to be fully utilized. Other entities, will have already been transferring waste to Bayview at different timeframes, over the course of 10-15 years. Because Trans-Jordan maintains the longest remaining life at a current landfill, by the time it begins to transfer to Bayview, there would be only about 32 years of life left at Bayview for solid waste disposal.

Mayor Eyre inquired as to whether Bayview conducted methane gas capture. Mr. Hooyer explained Bayview was initially exempt from previous EPA rules, however, since there was value in the gas, a contractor was hired to start the request for proposal (RFP) process. Since EPA regulations changed in August of 2016 and the threshold was lowered, Bayview is now required to install the system and the process to comply would continue over the next 18 months. Mr. Hooyer would be overseeing that final process.

Mr. Camp asked if green waste could be transferred to Bayview. Mr. Hooyer said green waste would not be accepted at Bayview since green waste does not necessarily require a landfill. Supplementary options for disposing green waste in the future would be an ongoing discussion for all entities.

Mr. Kakala, provided a brief general update and reported another board member would be leaving to go to Sandy City. Rick Smith, who held the longest term of 18 years, would retire on December 31, 2106. A residential gate rate increase was proposed from \$8 to \$10 and would now be in-step with county fees. There has not been a gate rate increase since 2009 and it would provide \$61,000 more income per year. Last year 30,000 loads were received from residential customers and revenue was approximately \$245,000. The increase would also speed up the gate process by eliminating time in making change from the old \$8 fee.

Mr. Hooyer thanked the council for allowing Mr. Hill and Mr. Kakala to be involved with Trans-Jordan Cities. He valued their involvement and appreciated having their help and insight as great students of solid waste, keeping themselves educated and up to date on current trends.

2.2 Future of Granite School District – Ben Horsley and Don Adams

The Granite District became debt free in 1996 when its last bond was paid off. At that time, the school board chose, to maintain a *pay as you go* program. In 2009, it was decided that plan was no longer

sustainable and a voter approved bond was presented for \$256 million, which was approved. With those funds, Granger and Olympus high schools were both rebuilt. Without a tax increase, money was converted from their capital levy to pay for programs. With that said, seven years later, facilities are in decline.

An extensive outreach effort on the part of the school board was a culmination of a yearlong effort to evaluate capital facilities. The following information was shared:

There are three Granite District schools located in Murray, which are, Twin Peaks and Woodstock elementary and Cottonwood High School. Nearly half of all Granite Schools are more than 50 years old with the challenge of more maintenance, renovations and general upkeep, before eventually needing to be replaced. Most existing facilities are not compatible with new and emerging education technologies and schools are in need of security upgrades.

Independent engineers provided district facility reports and each school was given a rating based on detailed assessment. Results prove that 20% of all Granite schools are in the 85% category, meaning 85% of a structure is in decline in need of repairs and renovations, and has reached the maximum life cycle. In addition, most all schools need seismic upgrades. In short, many capital expenses in Granite School District need to be addressed.

By law, the district cannot pull funding from another portion of the budget to fund capital projects. A breakdown of Granite's annual budget by expenditure was shared with the council.

Based on expertise of outside engineers, the greatest lifespan of a school building is 60-70 years. In order to keep up with declining schools the district plan is to rebuild one elementary school every year, one junior high every four years, and one high school every eight years. This new strategic plan will address ongoing needs and community meetings are expected to prepare voters for a new bond. The bond of 2009 did not take into account a longer term strategy.

The current capital budget is \$17 million and the new plan would require \$36.6 million annually. The Granite School District Board of Education has been exploring a myriad of long-term capital planning options to bridge the gap in funding and keep schools the best place to learn. The board has three options for long-term planning and is working with financial consultants to develop the best possible funding to address these capital needs.

How students are taught is evolving rapidly, especially in secondary schools. What was taught and how, in 1980s high schools, fares little resemblance to today. Twenty and forty years from now, the change will be even more significant. Mr. Adams stated that Granite was envious of the Murray School District, which had done a wonderful job with the high school. In order to meet the ever changing environment in the education system, more options and flexibility will be needed to provide a 21st century education.

2.3 Power Department Quarterly Report – Blaine Haacke

Mr. Haacke reviewed four important issues related to agreement contracts and long term decisions the council would be making.

Trans-Jordan Landfill

Trans-Jordan Landfill provides a 4.5 megawatt (MW) power plant for Murray City. It takes approximately 1.2 million tons of garbage to make 1 MW of power. The landfill generates approximately 30 million kW hours, of methane power per year, which provides electricity for about 2,200 Murray homes.

Mr. Camp asked if that provision would be ongoing after the plant closes. Mr. Haacke confirmed it would be providing methane electricity 15-20 years after the landfill was capped. The city's 15-year contract with Trans-Jordan would be in effect until 2022, allowing another six to seven years before renewal again.

Approximately 8-9% of Murray energy is provided by methane when combining Trans-Jordan with the Salt Lake County Landfill. Murray is very green when it comes to energy, being the only municipal system in the state with landfill accommodations, besides the Davis County plant.

The Murray City Council and mayor made contract decisions with both landfills in 2003 and 2008.

Title Five Emissions Report

There are emission issues with the Intermountain Power Agency (IPA) call back gas turbine plant. Although cleaner than coal and other fuels, natural gas is not considered a perfectly pure clean burn. The Murray gas turbines were installed in 2001 and licensed with the state, which allowed 100 tons of nitrogen oxide (NOx) emissions. At that time, the amount allowed was enough emissions to run the plant 24 hours a day, seven days a week, the entire year, which was approximately 8,760 hours. Over the years, all three turbines are tested separately to ensure the city is in compliance with state guidelines. The state approached the IPA plant several months ago, along with other municipals, Kennecott Copper Mine, and businesses, such as, dry cleaning businesses, to adhere to regulations differently than in the past. Under new rules, 100 NOx is now considered a major contributor and subject to federal and environmental concerns.

Therefore, the state lowered NOx allowances, to 69 tons instead of 100 tons, which would remove them from the major contributor category. The city hired an environmental attorney and an environmental consultant to help negotiate adjustments approving an even lower amount of 50 tons of NOx. Monitoring tests are very expensive and require full time employees during test observations, so negotiations also included an agreement discontinuing continuous monitoring. Testing is not required for zero to 50 tons of NOx and the plant would be in full compliance, would still function two thirds of the year at full load, operating 6,000 hours, at 32,000 kW; the plant would be considered under the major contributor guideline level.

Cooperating with the state was important and a modification letter would be submitted to the state.

IPA Call Back

Every season the city council and mayor are made aware as to whether energy should be called back from the IPA plant for use. Projected costs from IPA, other resources, and the market, are considered and if energy is less expensive elsewhere, call back energy is not necessary. Market prices are currently

working in the city's favor so a letter was sent to the Los Angeles Department of Power and Water (LADWPA) to let them know call back would not be needed for the summer, fall and winter of 2017.

The cost of energy from IPA is approximately \$60 per megawatt hour (MWh) and the average market price is \$42 per MWh. Projections are such that, call back might not be needed for years to come, due to low natural gas prices on the market. The city is in a good position, and will always have the option every six months to call back energy if there is a need.

Landfill #1

A 10 year old contract with Salt Lake Valley Landfill, located near Highway 201 and 5600 West, and made by the council at that time, will expire December 31, 2016. Murray City has first right of refusal for the 3 MW plant. An executive decision, along with staff, was made to continue with that landfill contract, as well, and provisions for a new contract are underway.

A mutual study was conducted to find out how much excess gas was being produced and if an upgrade should be considered due to the continuous need for flaring. The study proved the plant was producing an excess of 1.5 MW more, confirming the need for an additional engine or new construction half the size of the plant. The shared cost for the study was \$4,000 for the city and a matching \$4,000 by the Michigan based owner. However, the idea was abandoned due to the extreme cost to upgrade the Rocky Mountain Power infrastructure. The excess gas was not enough to justify construction costs.

The resource cost is \$60 MWh, the city's most expensive plant, however, for a renewable resource, it is comparatively less than wind, solar, geothermal, biomass, and methane gas. Better pricing could be had on the market, however, advantages to the city, such as, close proximity, green recognition, public relations and environmental benefits, outweigh that cost. Renewable Energy Certificates (REC) are retained at \$1.50, which offsets the \$60 MWh.

The decision was made to continue on with the landfill and the option was given to sign another 10 year contract. A new contract has been written, with the same escalation factors, and is awaiting signatures. The council would be reviewing the new contract soon. With a capacity factor of over 90%, the landfill is of great value to Murray and does not have any significant effect on rates.

Outage

On December 5, 2016, at 4:20 p.m. the city experienced an outage that was due to an excavating incident that occurred at the Intermountain Medical Center construction site. Three main circuit lines were hit, which were main feeders transferring power to businesses and neighborhoods in the area. Mr. Turner confirmed the site had been surveyed by Blue Stakes and pictures had been given to the construction company. What the contractor did not know, was that the large concrete retaining wall he was demolishing, had originally been poured around conduit, therefore, it all became disrupted when the wall was pulled away with the scoop truck. A large flash was seen, the excavator miraculously survived, however, the substation was burned up, affecting about 4,000 people in the area from 5000 South State Street, to Vine Street, to the indoor soccer area.

A total of six circuits were affected, which was basically the entire central substation. Heavy detailed work and manpower was required to repair the damage. Three circuits were repaired fairly quickly,

however, the last three were not repaired until well into evening and early morning. Challenges, such as, traffic, while maneuvering line trucks to specific areas was time consuming, however, crews were responsive, and worked without any breaks, knowing the magnitude of the outage. Not only was the underground system lost, overhead lines were also burned and line replacement was needed.

Several things were learned from the tremendous outage situation:

- Inadequate messaging system - Callers were either getting no signal, a continuous busy signal, or were cut off. Although, internet support was quick to assist in getting the phones back up, damage was not only discovered to the system located at the warehouse, but the current phone system was inadequate for handling high volume of inquiry calls. Also, with the current phone system, staff was not able to provide an informative phone message and was limited to only two people to answer calls. During future outages, having a pre-recorded phone message in place was suggested. A pre-recorded phone message might also redirect callers to social media for details. The idea, utilizing Facebook and Twitter, would be reviewed at an upcoming meeting, which could relieve a stressed phone system during such an incident.
- UTOPIA was affected also due to shared warehouse space where the outage affected the central control area. It was their hope that the city's uninterrupted power supply source could carry them, however it could not.
- The current generator is undersized and inadequate for lengthy outages. A bigger generator has been ordered and will produce enough power for both buildings.
- Crews responded well and were able to handle the massive situation.

Mr. Hales asked how long the power outage lasted. Mr. Haacke reported it lasted from 4:30 p.m. to approximately 6:00 a.m. in some areas.

Mr. Camp agreed utilizing social media was very effective in helping citizens understand a situation; after he posted helpful details on Facebook, he had reached 1,076 people, received seven comments and 12 shares. Mr. Brass agreed controlling the message was very important. Mr. Haacke would like to see a social media resource in place before the next outage. Ms. Turner appreciated being contacted by text so that she knew immediately about the outage. Mr. Haacke stated Channel 13 news had been in contact the following morning and stated they had been following social media in order to report to their customers, which reaffirmed the practicality of social media.

3. Announcements: Ms. Lopez made the following announcement:

- Thursday December 15, 2016, from noon until 2:00 p.m. the Council would hold its annual Open House Luncheon for city employees.

4. Adjournment: 6:18 p.m.

**Pattie Johnson
Council Office Administrator II**