TETON COUNTY INTEGRATED SOLID WASTE AND RECYCLING ADVISORY BOARD
Meeting Minutes
Dec 1, 2016

Members Present: Katie Dahlgren, Don Baker, Phil Cameron, Bob Arndt, Lorie Cahn (on phone), Andi Psmith, Joe Kola, Rob Weed

Other Present: Heather Overholser, ISWR Superintendent; Sean O’Malley, Teton County Director of Public Works; Caroline Sheahan, ISWR Financial Accountant; Mac Dukart, ISWR Waste Diversion Outreach Coordinator; Mari Allan Hanna, ISWR Admin Assistant; Matt Blair, ISWR Recycling Supervisor; Bill Hannel, ISWR Senior Recycling Operator; Kent Jasperson, ISWR Solid Waste and Recycling Manager; Greg Damm, ISWR Recycling Operator; Tim O’Donoghue, Riverwind Foundation-Sustainable Destination Program; Lindsey Ehinger, Sustainable Destinations Hot Shots Program; Scott Steen, inSight Sustainability; Paul Hansen, Teton County resident; Ken small, Teton County resident; Todd Graus, BioPac’r™; Jon Dyer, Environmental Health and Safety Specialist for Grand Teton Lodge Co.; Margaret Wilson, Grand Teton National Park; Ted Van Holland, Teton County resident; Commissioner Mark Newcomb; Commissioner Smokey Rhea

3:05pm: Meeting called to order by Phil Cameron at Big D Signature Construction.

Introductions

Discussion of Minutes from November Meeting
Ted Van Holland provided correction to November minutes, page 5, regarding the Montana Civil contract:

- Strike “Ted – renegotiating unit costs, will new unit cost apply only to overruns from original or only to additional units?”
- Replace with “Ted - Will the renegotiated price for excavation apply to additional units (those above the original estimated quantity to be excavated) or only the units that exceeded the original estimate?”

Motion to approve November Minutes with changes, Moved: Joe, Second: Andi, All in favor, motion carried.

Report from Board Chairman: Phil Cameron

- Forbes Article, October 4, 2016 - It Isn’t Easy Being (Profitably) Green: How Waste Management Is Rethinking Recycling
  ○ Circulated to board members as a way to keep current and engaged and generate discussion regarding solid waste and recycling topics.
  ○ Highlights
- Embodied energy in a ton of aluminum = 26 barrels of oil.
  - Mac - 96% less energy required to recycle aluminum than to manufacture from virgin ore.
- Waste Management reported the cancellation of glass recycling in Houston.
- Appreciation of Rob Weed for board service
  o Appreciation for dedication to the mission of solid waste and recycling and to the community. Hope Rob will stay involved.
  o Heather – Whenever staff needs help in any way - moving offices, at Pumpkin Chuck events, Recycling Center needs, you have always come through. Thank you for your dedication. Hope you will continue as a volunteer and committee member.
- Attended BCC workshop Monday.
  o Workshop included updates from Heather on all ISWR projects.
  o Good questions from commissioners, shows that they are aware of what is happening at ISWR.
  o Current discussion of the plans for an interim transfer station under the Golder contract.
    ▪ Heather and Sean are working to gather contacts/info on interim trash transfer construction to bring more information to the Commissioners when considering amending the Golder Contract.
    ▪ Additional info in Heather’s staff reports.
  o Phil discussed the overflowing ISWR workload
    ▪ Some items are fixed, i.e. deadlines with the state; others are more flexible.
    ▪ Terra Firma’s contract for composting expires in November 2017; Commissioner Vogelheim is going to get Keith Gingery’s opinion on a contract extension to allow for more flexibility during construction chaos at the site.
- Increased focus on access and transparency of public board information and proceedings.
  o Board members to send bios to post on ISWR website.
  o Board topics/issues to be posted as well.
  o New board members will receive guidelines/responsibilities from Keith Gingery about serving on county board.

Report from County Commissioner, Smokey Rhea:
- Thanks everybody for participating.
- This last year has been hard on the staff, extra work.
- Commissioner Vogelheim and Heather have kept the BCC informed of all that is happening at ISWR.
- Phil – Anything for Commissioner Rhea to report back to the BCC?
  o No response

Waste To Energy (WTE) Presentation, Paul Hansen and Ken Small:
- Presenters:
- Paul Hansen – Lifelong conservationist, environmentalist, fiscal and environmental responsibility expert.
- Ken Small – Industrial and environmental engineer, Jackson Hole resident, former ISWR committee member.

- Phil - WTE has been discussed by this board and the community in the past. This is an opportunity for those who are new to this issue to be brought up to speed and for others to receive updates on the issue.
- Paul
  - Thank you, Phil.
  - Previous experience is in acid rain mitigation.
  - Intention is to convince audience to take another look at post-recycle waste management.
  - No financial stake in this.
  - Wants the Jackson Hole community to be a leader.
  - The technology chosen for Teton County should
    - Be environmentally superior and
    - Meet the needs of our region, where approximately 28,000 tons of solid waste annually are sent 100 miles to landfill.
  - The case for WTE
    - The world has changed. WTE is better than it used to be. A new generation of waste to energy plants are in use in Europe and the U.S.
    - Distributed EPA handouts – landfills cause 2 to 6 more times GHG than does waste to energy conversion.
    - Novo Energy as an example of a WTE technology company.
    - WTE particularly well suited to remote location like ours b/c of distance to landfill.
    - WTE is intended to be used in conjunction with a recycling operation.
    - In a town that has our values and abilities, we should show leadership. Show our visitors another way to protect nature. Like vertical harvest.
  - Proposed next step is to take an opportunity to explore and educate ourselves.
    - Recommends a feasibility study to be completed by a 3rd party independent consultant.
- Ken
  - Thank you for the opportunity to talk about this.
  - Slide show “Waste to Energy in Teton County.”
    - Significant amount of energy in MSW.
    - Most common is to make electricity, steam, or gas.
    - Different approaches
      - Direct combustion
        - MSW burned, heat captured by water/steam
      - vs. Biologic
- Anaerobic digestion – used most commonly in wastewater treatment
- Biological drying – used for coal fired plants
  - Commercially proven Waste Conversion Technologies in the U.S.
    - MSW combustion – mass burn and refuse derived fuel.
    - MSW composting
  - Not Commercially Proven
    - Conventional gasification; Plasma arc gasification; Pyrolysis; Anaerobic digestion; Hydrolysis/Fermentation
- Change in perception of direct combustion due to
  - Digital controls, environmental chemistry, limitation on landfills, economic and regulatory pressure on other sources of energy (coal, hydro)
  - Paul – WTE industry took a hit with drop in natural gas prices
- Recommends engineering and economic feasibility study, to discover
  - Technology alternatives
  - Permit requirements – air quality concerns here are significant
  - Assumptions on future power and transportation costs
  - Assumptions on assured fuel source – need waste supply contracts from the region
  - Economic analysis – capital cost, operations/maintenance cost/ impact on other Teton County services

Questions?
- Don – Seems like most of the facilities are orders of magnitude larger than Teton County. Are there smaller operations?
  - Paul – Yes, Alexandria, VA burns 80 tons per day.
- Don – Is it an economical solution in Alexandria?
  - Ken – Yes, Alexandria is breaking even and paying for their recycling program. They have an ash landfill.
  - Ken – Novo claims that their ash passes groundwater safety regulations.
- Phil – What would the delivered price per kwh be on a plant here?
  - Ken – 10 to 11 cents per kwh. Prices here now are? Phil- 5 cents.
- Ken – There could be a use for the heat that is generated, a green house. The steam could travel up to about 1 mile.
- Ken – Teton County would get 2 megawatts based on 25,000 tons per year.
- Commissioner Rhea - More questions and interest than time will allow. Please share the slideshow?
  - Phil - Yes.
- Commissioner Rhea – How long ago and how extensively has this board discussed WTE?
  - Phil – Ongoing conversations with Paul for over a year. Additional conversations prior to Phil’s term on the ISWR board. The current board has not explored further as of yet.
Heather – Thank you Paul and Ken. Would like to comment on Commissioner Rhea’s questions.

- ISWR has been looking at this issue for years.
- Technologies do evolve and WTE is considered superior to landfiling in the waste hierarchy determined by the EPA.
- But wants to emphasize that any future consideration of WTE is independent of current ISWR endeavors.
  - Will still need recycling center, trash transfer, etc.
  - WTE could be an add-on at some point.
    - Paul agrees.
    - Ken - Tipping floor should accommodate any future plans for WTE.
    - Heather – Will the existing Trash Transfer site accommodate WTE footprint?
      - Ken – Yes, absolutely.
- Visited WTE plant in Florida, spring 2016. Plant had contract with Florida Power and Light and provided a tiny fraction of the energy in the FP&L system. FP&L cancelled their contract with the County. The plant has had to further invest in additional burners. The County’s waste stream is beginning to outgrow the WTE capacity and will at some point landfill what they don’t have capacity for.
  - Ken – Florida Power and Light is a gorilla. That example is much larger than what would be proposed for this community.
    - Contract/Legal aspects are a consideration.
    - Possible advantage to have power redundancy here.
- Commissioner Newcomb – Would this plant generate power for the grid?
  - Paul – Yes.
- Commissioner Newcomb – Can the power generation be easily scaled up/down?
- Phil – will continue conversation with board, staff, and commissioners. Will compile additional questions from everyone, report back at next meeting.
- Paul + Ken – emphasized that this concept is proposed as a complement to the recycling program. A way to further increase diversion.

Report from County Commissioner, Mark Newcomb:
- Thank you to the board for all hard work. A lot on your plate. Great job.

Finance Committee Report, Caroline Sheahan:
- Accruals took place in October. (Most of the expenses incurred in July, and some of the revenue, get pulled back into previous fiscal year).
- TTS Inbound + Outbound tonnage – FY17 tonnages appear lower than FY16 due to a large load of concrete and clean fill in 2015. MSW is actually up. See board packet documents.
• Recycling tonnages are off the charts, significantly higher than FY16. See board packet documents.
• Yard waste – October was the biggest month ever, 765 tons. November 427 tons. Over the last 7 years, the highest reported tonnages were 420-550 tons. But these high points were in May/June. October surge is unusual. Possibly due to a wind/snow storm event.
• Highest ever customer visitation within 1 day to Trash Transfer Station occurred in October at 286 customers.
• Tonnages have not been nearly this high since 2008.
• FY2016 textile tonnages (128.8 tons) surpassed electronics (102.8 tons).
• Diversion rate at 38%, above national average of 34%. JCR revenues are consistent, even with lower commodity prices.
• FY16 final audited numbers will be shared next month. Very pleased with revenue over expenses = $187,000 in the black after depreciation.
  o Joe – Do we still show a net pension liability?
  o Caroline - Yes, but it went down from last fiscal year.
  o Caroline – The TTS tonnages are up by ~5% compared to this time last year. Even with increased tonnages and the $5 increase in tip fee, the TTS revenue graph indicates a decrease from last year. This is due to the delay in collecting AR. At any given time, ISWR has about $500K in AR. Only $60,000-80,000 of monthly revenue is collected in cash. All TTS AR is collected by the treasurer’s office. Each October, during the audit, AR is updated on the balance sheet.
  o Kent – Speaking of the activity at the transfer station. We could not have planned Scale House construction any better. We could never have handled the 200+ number of vehicles per day all summer in the old facility.
  o Phil – Any way to determine how much of that is commercial?
  o Margaret – Residential may be more comfortable utilizing new facility.
  o Rob – Any further information on rounding procedures at Trash Transfer Station? And is there further consideration of a minimum?
  o Kent – No change to rounding. Rounding is designed to facilitate cash handling. No minimum fee on credit cards. We have talked about a convenience fee, something easy to calculate. And have discussed a minimum fee of $5.
  o Heather – Considered a minimum fee in conjunction with the next tip fee adjustment for FY2018, possibly $5 minimum for credit cards.
• Joe – Thanks to Caroline and committee for filling in. Has been away because he lost his father last week. Will circulate the monthly reports next week.

Outreach and Education Committee Report, Kent Jasperson reporting for Mac Dukart:
• Fall Clean Up 3 day event - 76 tons delivered to rodeo grounds + 60 tons delivered to the Trash Transfer Station.
  o Margaret – with pumpkins?
  o Kent – yes, pumpkins included in the total. Pumpkins not reported separately this year.
Commissioner Rhea – Residents don’t pay during fall cleanup?
  Heather – No.
Commissioner Rhea – Do people hold their yard waste until this event?
  • Heather/Kent - Some do.
Caroline – Fall cleanup was the first week in November and yard waste numbers were high for October.
Commissioner Rhea – The number of yard maintenance companies has increased.
Andi – Do residential landscape companies pay?
Kent – Yes, they are commercial.
Phil – Cottonwood HOA yard waste bins have decreased community waste hauling contract costs. Hoping to use this as a starting point for Pay As You Throw.

Zero Waste Committee Report, Heather Overholser:
  • Staff to meet with Town of Jackson next week on Road to Zero Waste items.
  • BCC zero waste workshop pushed back to January

Compost Committee Report, Heather Overholser:
  • Contract in place with O₂ composting, aerated static pile experts.
  • Working on site layout, cost for conveyors, infrastructure.
  • Infrastructure: some will be provided by county and some will be provided by contractor.
  • The concern is the state of the site. It will continue to be in flux due to construction. Terra Firma has been very flexible and has operated in the changing conditions without increased costs. For continuity through the remainder of this project (through Nov 2019), it would be best for Terra Firma’s contract to be extended. In this case, an RFP would go out in advance of the Nov 2019 timeline. At that time, with the information from the O₂ Composting consultation, we will be able to write a better scope of work and include Aerated Static Pile composting and food waste.

Facilities Committee Report, Heather Overholser:
  • Recycling Center update
    • Working with the contractor and County IT to prepare for the move.
    • It’s unlikely that we will spend full force account.
    • Most delays are due to weather.
  • Scale House
    • The fire suppression inspector called out a number of issues.
    • Heather extended temporary certificate of occupancy through end of December.
    • The project is still on budget.
    • The change order for the additional items required by the inspector was approved.
  • Waste excavation
    • Waste excavation was not completed this summer.
    • 77% more waste than was originally estimated.
- We know much more than we did in the beginning about the amount of waste in the ground.
- We haven’t yet reached the quantity of waste that was originally estimated, but we will far surpass it next summer.
- Have approval to enter Forest Service land March 1.
- Montana Civil has made requests for two change in conditions to their contract.
  - One for the additional volume of waste. Excavation below grade is slow going – requires additional ramps and more time to maneuver equipment and move waste.
  - A second for fuel costs. Fuel has gone up 44% since the original bid. There was no escalator for fuel in the original bid since it was originally anticipated to be a single-season project.
  - The higher unit costs will not apply to the amount of waste in the original scope of work. They will only be applied to the work beyond the original estimate.
- Remobilization is only 37% of the initial mobilization cost.
- Montana Civil has done a terrific job of preparing the site for winter. We are pleased with how they left the site.
  - Andi – Do we charge for the equipment to remain over the winter?
  - Heather/Kent – No.
  - Don – 77% is a very exact number. How will we determine what is part of the original and what is additional?
  - Heather – Through surveys, we are able to closely track the yards removed. Once we reach 300,000 yards removed, the new rate will take effect.

- **Interim Transfer Station**
  - Golder has submitted a proposal for engineering support for the remainder of waste excavation, the interim transfer building, and the relocation from the lower to the upper pad.
  - Sean, Heather and others are considering alternatives for cost savings. This contract may have to be bid out. One idea is to have the transfer building be design-build. The timeline for bids and permitting will be tight. A decision will be made by the Commissioners on Tuesday, Dec 5.
  - Commissioner Rhea – There will have to be significant cost savings to warrant a change at this point?
  - Heather - We won’t really know what the cost will be until mid-January. This process may set us back up to two months, and starting construction in August is not ideal.

**Other Announcements:**

- Phil – The Sustainability Series will be on the 3rd Thursday, Dec 15, 6pm at Spark. The topic is energy and the night skies.
• Jon Dyer – Grand Teton Lodge Company is excited about composting. They have been working with Subaru on zero landfill initiatives. The signs for the school trailers are in, designs by Recycle Across America.

• Todd Graus - Anaerobic digestion of green waste is proven.
  o Ken – Yes, but not of MSW.
  o Todd’s company, BioPac’r™ offers solutions for diversion of grass clippings from landfill, offering compactors, generating silage from clippings and is working with Waste Management on a large project. Phil will share additional info with meeting attendees.

• Tim O’Donoghue, on behalf of Sustainable Destinations, the Riverwind Foundation and the Hot Shots program, thank ISWR for being such a reliable partner, along with Slow Food in the Tetons, Hole Food Rescue, Energy Conservation Works, and others.
  o The Hot Shots program received funding from a USDA Rural Development grant, the Travel and Tourism board and private funding.
  o Hot Shots meet with businesses in Teton County to assist them with the application for the RRR Business Leaders program. The meetings are 60-90 minutes in which businesses consider all areas of conservation and sustainability, including waste management, energy efficiency, sustainable fuels, etc…
  o Within less than 4 months, the number of RRR Business Leaders has increased from 100 to 130. The goal is 200 by June 2017.
  o These are great young people who care about the environment and have the networking/outreach skills to make an impact.
  o Additionally, National Geographic contacted the Riverwind Foundation and the JH Chamber of Commerce today to announce that Jackson is one of the three finalists for the NatGeo World Legacy Award. As a community and a destination, let’s keep doing good work. Tim will travel to Germany with other Chamber representatives for the next step. The other finalists are Segera Retreat, Kenya and the country of Slovenia.
    ▪ Phil – This has been a fantastic collaboration of these sustainability related organizations. It increases the impact of organizations like ISWR and frees up people like Mac to do more.
    ▪ Commissioner Rhea – what is the website? Sustainabledestinations.org

• Phil – Thank you again, Rob. Presented certificate.

• Andi – One follow up to the Amazon discussion from the last meeting. Received a gift card packaged in a book sized piece of cardboard. We should provide this feedback in our conversations with them in the future.

Motion to Adjourn, Moved: Don; Second Andi. Meeting adjourned 5:00 pm.
Respectfully submitted,
Mari Allan Hanna
ISWR Administrative Assistant

Approved on ____________________________
Attest:

_______________________________________  _____________________________________

Katie Dahlgren, ISWR Secretary            Phil Cameron, Board Chair