

Food Waste
Collection Pilot in
Grand Teton National Park:
A collaborative step toward
municipal food waste
composting in
Teton County and Zero
Landfill National Parks



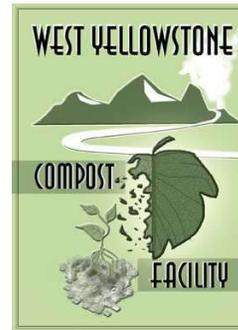
FINDING OUT WHAT WE DIDN'T KNOW

- Ultimate goal of Zero Landfill.
- Collaboration between government agencies, nonprofit organizations, for-profit businesses and a corporate sponsor.
- Valuable lessons learned.



Who's involved:

- Teton County ISWR
- Subaru Corporation
- National Parks Conservation Association
- Grand Teton National Park
- Yellowstone National Park
- Grand Teton Lodge Company
- Signal Mountain Lodge
- West Yellowstone Composting Facility
- Westbank Sanitation



Why food waste?

- In Grand Teton National Park, 40% of waste is food waste.
- Valuable resource being wasted in landfill.
- Teton County is on the Road to Zero Waste.
- Teton County has 10 years of experience composting yard waste.
- Pilot program allows for early troubleshooting of a municipal food composting program.



The Road to Zero Waste

- 2014 adoption of a Zero Waste Resolution
- Diverting 60% of waste from landfill by 2030.
- Striving for municipal food waste composting in Teton County by 2020-21.
- Grand Teton National Park lies within Teton County, so GTNP's food waste diversion directly affects Teton County's diversion rates.
- Opportunity for West Yellowstone Compost Facility to handle and process greater volumes without long term commitment – Yellowstone is also on the road to Zero Waste.





Pilot Project Summary

- May - October 2017
- 2 Concessionaires, 7 properties
- 1 pickup per week – every Thursday
- Hauled to West Yellowstone Compost Facility in West Yellowstone, Montana
- The finished compost from the project has been made available to the public, utilized in mine reclamation and also in excavation and road projects within Yellowstone National Park.

Data and Results

- As of Aug 24, over 50 tons of food waste have been sent to the West Yellowstone Compost Facility.
- Differences from early projections compared to the actual results.
- Locations have very limited and challenging space for bins.
- Low contamination rates, high participant excitement.



Contamination

- Common contaminants
 - Yogurt cups
 - Rubber gloves
 - Dust masks
- “Their food waste program is exceptional. They should be VERY proud of their managers for communicating the standards....they are as close to perfect as I could imagine. No broken bags, no contamination, just beautiful to see.... Like synchronized swimming without the nose plugs and funny-looking shower caps.” –Dan Webb, Westbank Sanitation





Bin Sizes and Recorded Volumes

- Some 95 gallon carts
- 4, 6 , and 8 yard dumpsters
- In some locations, bin sizing is more dependent on space available at the facility and staff operations than food waste generation rates.
- Note that food waste is much heavier than mixed trash. 95 gallon carts are difficult for staff to maneuver.
- Maximizing use of bins
 - All bins have been recorded at 75-100% capacity at nearly every tip.



Odor has not been an issue

Jon Dyer
with
Grand Teton
Lodge
Company



 **compost**
food and food-related paper



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Education led to low contamination

- All staff were instructed in general project awareness from the very beginning.
- Signage funded through Subaru/NPCA and designed through Recycle Across America.
- Followed up with on-site staff training at each location.
- The most difficult location was the employee dining room
- There was confusion in the beginning but efficient communication, continuing education and positive reinforcement resolved the problems quickly.
- Staff is engaged and excited to be a part of the project.
- “You guys are getting the most bang for your buck with 99% of the material you bring in being composted instead of pulled out and sent to the landfill as contaminants.” John Burns, West Yellowstone Compost Facility

Challenge of finding space for receptacles

- Limited space at some locations
- Wildlife protection through odor control and certified bear proof containers
- Rear load truck vs. Front load truck – pros and cons



Jennifer
Boysen with
Westbank
Sanitation





Trucks: Hauling Schedule and Logistics

- Special permits to travel in Idaho and Yellowstone
- Competition with Sysco deliveries
- Restrictions on collection and hauling hours: observe concessionaire quiet hours, Yellowstone National Park travel restrictions
- Bin and haul truck compatibility
- Installation of water tanks, pump, sump pump for bin cleaning
- 95 gallon carts – difficult to maneuver. Food waste is heavy!

Bags

- Non-compostable bags preferred by hauler and compost facility
- Contains liquids better
- Minimizes bin washing
- Reduces bin odor
- Best for Westbank Sanitation and West Yellowstone Composting Facility
- Bins without bags a major problem – maggots. Yuck!





Odor Neutralizer

- Sprayed in every bin once bin is emptied and cleaned
- Not just for odor; contains enzymes to break down any food left in bins
- Small amount needed for entire season
- End product breaks down into water and carbon dioxide
- Reviewed and approved by West Yellowstone Compost Facility
- Non-toxic, environmentally safe

Impact Summary – Grand Teton Lodge Company

- A season-end report will be produced by Teton County for all involved.
- Funding is an issue.
- Pilot will be reassessed by entire team, including Subaru and NPCA, at end of season to determine if it will continue in 2018.
- Once Teton County has their food composting facility up, costs for concessionaires will decrease.



Impact Summary – Teton County

- Extremely positive feedback
- Businesses are hearing about the project and expressing interest in future municipal composting in the greater Teton County area.
 - Businesses will have to be creative to make space for bins.
- Pilot Program has provided an immense amount of information to Teton County and all involved.
 - Start small.
 - Start with early adopters, enthusiastic supporters.
 - Write a precise scope of work for the hauling RFP.
 - Education and training are critical.



“We are happy, as we know that close to 50% of our waste is food waste, so to truly make a difference in our diversion, we need to be able to effectively compost.”
- Grand Teton National Park



“We have been very excited about the pilot program and how it has aided us in developing a system for collection, storage, and transportation of compostable materials. This prepares us (and others who learn from us) for 2020 when the Teton County facility opens. We are hopeful that once the facility opens, we will immediately be able to divert 15% of our organic waste. ” Margaret Wilson, Grand Teton National Park



