### **County of Los Alamos**



### Agenda - Final

### **Environmental Sustainability Board**

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	Lisa Bakosi, Chair; Heather Ward, Vice-Chair; Susan I Dorothy Brown; Amanda MacDonald; Warren Mazane Heidi Rogers; Members	,
Thursday, April 18, 2019	5:30 PM	1000 Central Avenue, Suite 110

#### 1. CALL TO ORDER - ROLL CALL

#### 2. PUBLIC COMMENT

This section of the agenda is reserved for comments from the public on items that are not otherwise included in this agenda.

#### 3. APPROVAL OF AGENDA

#### 4. APPROVAL OF MINUTES

<u>11901-19</u> Approval of the March 21, 2019, Environmental Sustainability Board Minutes

Presenters: Lisa Bakosi

Attachments: A - Draft ESB Minutes March 21, 2019

#### 5. BOARD BUSINESS

- <u>11903-19</u> Discuss the 2019 Recycler of the Year
  - **Presenters:** Lisa Bakosi
  - Attachments: B Recycler of the Year Nomination Followup Questions
- <u>11904-19</u> Compost Operator Certification Presentation by Joshua Levings

**Presenters:** Lisa Bakosi

- Attachments:
   C Compost Operator Certification Presentation by Joshua Levings
- 11905-19Zero Waste Team Food Waste Reduction for Los Alamos<br/>Restaurants
  - **Presenters:** Lisa Bakosi

#### 6. REPORTS

- A. Chair's Report Lisa Bakosi
- B. Board Member Reports
- C. Liaison's Reports
- 1). Board of Public Utilities Sue Barns
- 2). Planning and Zoning Commission Vacant
- 3). Transportation Board Heather Ward
- 4). Parks and Recreation Board Heidi Rogers
- 5). Community Development Advisory Board Warren Mazanec
- 6). County Council Liaison Antonio Maggiore
- D. Subcommittee and Team Reports
- 1). Sava As You Throw Research Subcommittee Sue Barns
- 2). Los Alamos Public Schools Team Lisa Bakosi
- 3). Zero Waste Los Alamos Team Dorothy Brown

#### 7. STAFF REPORT

- <u>11907-19</u> March 2019 Residential Sustainability Report
  - **Presenters:** Angelica Gurule

Attachments: <u>E - Residential Sustainability Report - March 2019</u>

#### 8. PREVIEW OF UPCOMING AGENDA ITEMS

#### 9. ADJOURNMENT

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the County Human Resources Division at 662-8040 at least one week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes can be provided in various accessible formats. Please contact the personnel in the Community Services Administration Office at 662-8163 if a summary or other type of accessible format is needed.

Agenda No.:	
Index (Council Goals):	
Presenters:	Lisa Bakosi
Legislative File:	11901-19

#### Title

Approval of the March 21, 2019, Environmental Sustainability Board Minutes

#### **Recommended Action Motion**

I move that the Environmental Sustainability Board approve the March 21, 2019, minutes as presented.

#### Or

I move that the Environmental Sustainability Board approve the March 21, 2019 minutes as amended.

#### Body

The ESB will review and approve the March 21, 2019, Environmental Sustainability Board Minutes.

#### **Attachments**

A - Draft ESB Minutes March 21, 2019

**County of Los Alamos** 

Minutes

### **Environmental Sustainability Board**

Lisa Bakosi, Chair; Heather Ward, Vice-Chair; Susan Barns; Dorothy Brown; Amanda MacDonald; Warren Mazanec; and Heidi Rogers; Members

- Thursday, March 21, 2019	5:30 PM	1000 Central Avenue, Suite 110

#### 1. CALL TO ORDER - ROLL CALL

The ESB Chair, Lisa Bakosi, called the meeting to order at 5:32 p.m. The following members were in attendance:

Present: Board Chair Bakosi, Vice-Chair Ward, Member Barns, Member Brown, Member Mazanec and Member MacDonald

Absent: Member Rogers

#### 2. PUBLIC COMMENT

None

#### 3. APPROVAL OF AGENDA

A motion was made by Member Barns, seconded by Member Mazanec, that the agenda be approved as amended. Barranca Waste Audit Presentaion was moved to be the second item on the Board of Business.

The motion passed unanimously

#### 4. APPROVAL OF MINUTES

<u>11830-19</u> Approval of the February 21, 2019, Environmental Sustainability Board Minutes

Presenters: Lisa Bakosi

Attachments: A - Draft ESB Minutes February 21, 2019

A motion was made by Member Barns, seconded by Member Brown, that the February 21, 2019 minutes be approved as presented.

The motion passed with Vice-Chair Ward abstaining.

#### 5. BOARD BUSINESS

11833-19 The Climate Crisis and Its Solutions Presented by Julia Ying

Presenters: Lisa Bakosi



#### Attachments: B - The Climate Crisis and Its Solutions Presented by Julia Ying

Julia Ying is personally trained by former US Vice President Al Gore and The Climate Reality Project to serve as a volunteer Climate Reality Leader for the Climate Reality Leadership Corps. The presentation informed and educated the ESB and public about the climate crisis and its solutions so they can be encouraged to take part in its solutions to transition our world to a sustainable future.

#### 11836-19 Proposed Commercial Rate Increase

Presenters: Lisa Bakosi

Attachments: D - Draft Proposed Commercial Rate Increase

Environmental Services has developed several options to meet the current deficit in the Commercial Program area. They presented the options to the ESB and discussed the options and other solutions. Member Mazanec had a few more questions for Angelica to look into for the next meeting.

#### 11832-19 SMM Food Waste Source Reduction Webinar Overview by Sara Thurgood

Presenters: Lisa Bakosi

<u>Attachments:</u> <u>C - SMM Food Waste Reduction Webinar Overview by Sara Thurgood</u>

Environmental Services Office Specialist Sara Thurgood presented an overview of the SMM Food Waste Source Reduction webinar provided by the Environmental Protection Agency (EPA). The information included in the presentation was about how businesses can reduce food waste and save money by implementing food recovery strategies.

**<u>11834-19</u>** Barranca Elementary Waste Audit Presentation

<u>Presenters:</u> Angelica Gurule

#### Attachments: <u>E - E - Barranca Elementary Waste Audit Results</u>

Ms. Angela Lopez's 3rd grade students performed a waste audit of lunch room trash. Students learned about the different types of waste that are being generated and recommended ways in which trash can be reduced either by preventing waste in the first place, recycling, composting or sharing. Student Aven Heavner attended and stated, "I'm Aven Heavner and I say we need recycling bins in the school cafeteria. We don't have any and I'm really bugged by it. At my old school we had an entire green team looking into the trash and making sure that all the recycables were in the right bin and they were determined they would put on gloves and they would dig through the trash to actually find them. I want that to happen at our school."

#### 6. **REPORTS**

#### A. Chair's Report - Lisa Bakosi

Board Chair Bakosi attended the B&C luncheon and let them know the creation of the

Save as You Throw Research subcommittee will be going to council for approval. She also talked about the upcoming events that Environmental Services and Zero Waste team will be participating in.

#### B. Board Member Reports

Board Member Mazanec commented on the good customer service being given by Donald Baros at the Overlook Convenience Center. He also noted that the fencing for the station should be worked on to prevent illegal dumping. Angelica Gurule gave a quick update on the station noting that Environmental Services are working on cast estimates to fence the site and make it more accessible for recycle material. Board member Barns commented on a meeting she attended in Taos about Taos Kit Carson renewable energy cooperative. Kathleen Taylor commented on renewable energy that could be placed in buildings in Los Alamos, as well as raise awareness that the old buildings in Los Alamos need to be upgrade to make them more energy & water efficient. Member Barns also touched on the Save as You Throw subcommittee.

#### C. Liaison's Reports

#### 1). Board of Public Utilities - Sue Barns

Member Barns reported that the roundabout construction started and will take two years. Otowi Well #2 drill is done and will be tested soon. They have signed the contract for the SMART meters. As well as talked about the big wind storm. FY2020 budget was approved.

#### 2). Planning and Zoning Commission - Vacant

Board Chair Bakosi reported that the upcoming housing developments will be starting spring 2019. The adoption of mixed use (MU) zoning district laid the ground work for several new developments. The following with have public hearings with the PLanning & Zone (PNZ) in 2019; 70 affordable rental units on DP Road called the Canyon Walk apartments, 150 market rate rental units on the former Los Alamod Site Office (LASO) by the hospital called the Hill, 80 affordable units for senior living on DP Road.

#### 3). Transportation Board - Heather Ward/Don Machen

Board Chair Bakosi gave an update from when she was at the B & C luncheon.

#### 4). Parks and Recreation Board - Heidi Rogers

Update was given in the board member report.

Member Mazanec gave an update on the Community Development Advisory Board meeting he attended. There was discussion on clarity and wording on certain codes.

#### 6). County Council Liaison - Antonio Maggiore

County Council Liaison Maggiore reported that the council is looking forward to hearing from the boards and approving what is needed to be approve. He also gave a shoutout to

Philo and Angelica for offering special pickup from the wind storm blowing the trees down around the County.

#### D. Subcommittee/Team Reports

#### 1). Los Alamos Public Schools Team - Lisa Bakosi

Board Chair Bakosi reported that the High School Eco Club got permission to march in the Global Strike event in Santa Fe that was also a global event. She also mentioned that the high school is working on a Green New Deal and the Sunrise Movement. The Green Earth club in the middle school are creating posters to educate about recycling. Jody Benson commented on the meeting she attended with the Middle School Green Earth Club where Principal Easton attended and informed the group he will give them the recycle bins if they sign up and take the bins out. If they don't succeed in doing so, they will be taken away.

#### 2). Zero Waste Los Alamos - Dorothy Brown

Member Brown summarized the meeting that was held, including the presentation on Turning Waste into Profit, restructuring of the meetings, future outreach activities and the celebration of the Zero Waste team turning 1 year old. Her notes were as followed:

Elchin Jafarov presentation about his composting system and business - "Turning Waste Into Profit."

#### **Discussion of structuring ZWLA meetings**

- 20 minutes for a speaker
- 5 minutes per sub-group for one person to give an update
  - Schools
  - Retail/groceries: (2%);
  - Restaurants: (22% full service restaurants, 15% fast food)
  - Food rescue/food banks
  - Residents/consumers (50%)
  - Composting
- 30 minutes for one sub-group to discuss progress and get feedback
- Update on LA Daily Post upcoming articles
- Update on outreach events

#### Booth for Zero Waste Events

- Tiffany, Sara, and Elchin will work with Angelica to develop an action plan
- On idea is to define a setup, use same setup for all events, store materials in one place for easy retrieval
- Will use a Google Docs spreadsheet to get sign-ups for volunteers for each event

#### **Daily Post Articles**

- April More on an aspect of food waste reduction and mention of booth at Earth Day - 500 words each, due April 5
  - AG State of Los Alamos County Environment
  - SB Reducing Food Waste
  - Zero Waste Events
- May Wish Cycling Sara
- June Restaurants and Zero Waste Julia and Jody

#### **Outreach activities:**

- April 27: Earth Day Festival at PEEC 10-2
- May 11: Clean Up Los Alamos Day at Ashley Pond 12-1
- May 12 ; UU Sunday Forum 9:30-10:30 on Food Waste Sue Barnes
- May 16, June 20: Booth at Farmers Market
- May 21: Talk to League of Women Voters "Lunch with a Leader", 11:30-1, Mesa Public Library. Sue, Angelica, Elchin, Tiffany, Jody
- May 24: Zero Waste event at Friday Concert
- June 15: Ignite event at LA Makers Sue Barnes Food Waste
- Other venues to explore: Voices of Los Alamos, ask Council to do a Food Waste Proclamation (AG has already talked with Chair and Vice Chair about Zero Waste)

Next meeting: April 17, 2019 9-10:30 Clarify Zero Waste Goals for 2019

#### 7. STAFF REPORT

Staff Liaison Angelica Gurule reported that Environmental Services started brush pick up this month. The test run to deliver glass to Coors Miller in Golden Colorado went really well and they want to continue receiving our glass.

**<u>11831-19</u>** February 2019 Residential Sustainability Report

Presenters: Angelica Gurule

Attachments: F - Residential Sustainability Report Without Brush - February 2019

Staff liaison Angelica Gurule went over February's residential sustainability report.

#### 8. PREVIEW OF UPCOMING AGENDA ITEMS

Work plan for 2020

#### 9. ADJOURNMENT

### A motion was made by Member Mazanec, seconded by Member Barns, that the meeting be adjourned.

#### The meeting adjourned at 7:32 p.m.

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Agenda No.:	
ndex (Council Goals):	
Presenters:	Lisa Bakosi
Legislative File:	11903-19

#### Title

Discuss the 2019 Recycler of the Year

#### **Recommended Action Motion**

N/A

#### Body

The ESB will discuss the 2019 Recycler of the Year Award. In 2018 there was two categories -Educational Institute and Business/Non-Profit. The ESB has the ability to revise the award program, categories and criteria to better align with waste reduction goals.

Initially, the overall goal of this award program was to engage and encourage the business community to participate in recycling and sustainability. With strong participation in the public schools are, the award categories evolved to include educational institutions.

The tentative plan is as follows:

- April 18 discuss and define 2019 Recycler of the Year categories and criteria
- April 27 (starting at Earth Day) Begin accepting nominations
- May Nominees must accept nomination and provide additional information (See questionnaire)
- May 13 Nominations and responses are submitted to public for vote using Survey Monkey
- June 7/8th TENTATIVE: Winners will be announced at 2019 Los Alamos Chamber of Commerce Business Awards Reception and at Chamber Fest

#### Attachments

B - Recycler of the Year Nomination Follow up Questions



#### Recycler of the Year Nominee Follow-up Questions

Name of Organization: \_\_\_\_\_

Contact Information: \_\_\_\_\_

- 1. Please describe this organization's efforts to reduce waste in our community.
- 2. Does this organization make an effort to re-use items that might otherwise be destined for a landfill? Please explain.
- 3. Please describe the organization's use of recycled and/or environmentally preferred supplies and materials if applicable.
- 4. Tell us about their recycling program (including what materials are recycled) and what percentage of employees are using it?
- 5. Please describe how the organization has integrated environmental concerns into their products and services if applicable.
- 6. Does the organization educate and support their consumers in reducing waste or re-using or recycling materials? Please elaborate or provide examples.
- 7. Has the organization made efforts to support employees in reducing waste or re-using materials or recycling? Please explain.
- 8. Does the organization have a mission that includes a positive environmental impact? Tell us about it.
- 9. How does this organization ensure that hazardous waste is disposed of properly (if applicable)?
- **10.** How has this organization improved, enhanced programs, or added new ones over the last year?
- 11. What else would you like us to know?

Agenda No.:Index (Council Goals):Presenters:Lisa BakosiLegislative File:11904-19

#### Title

Compost Operator Certification Presentation by Joshua Levings

#### **Recommended Action Motion**

N/A

#### Body

Senior Office Specialist, Joshua Levings will present an update from the NMED Solid Waste Bureau Compost Operator Certification course. The ESB is continuing to explore the possibility of food composting.

#### **Attachments**

C - Compost Operator Certification Presentation by Joshua Levings

# Compost Operator Certification By Joshua Levings

### What is composting?

 Composting is a controlled, biological, aerobic process to speed up the decomposition of organic materials.







# The composting process

- Composting requires a balance of air, water, carbon (browns) and nitrogen (greens). If these ingredients are out of balance the microorganisms responsible for composting can not thrive.
  - Optimal carbon to nitrogen ration is from 30:1 up to 60:1
  - Optimal moisture content is 50% to 60%



### Microorganisms

- Psychrophilic
  - Needed to start decomposition in winter
    - Thrive at temperatures of 32° F to 68° F
- Mesophilic
  - Start the heating process
    - Thrive at temperatures of 68° F to 113° F
- Thermophilic
  - Maintain the heating process
    - Thrive at temperatures of 113° F and above



# Carbon to nitrogen ratio

- Why is this ratio important
  - Microorganisms use carbon for energy and building blocks and nitrogen for building blocks only.
    - Too much carbon based material and not enough nitrogen based material the composting process stops.
    - Too much nitrogen based material and not enough carbon based material and the composting process will produce a sulfur smell.
    - Not enough air or water and the microbes will stop reproducing



### What is compost?

 Compost is simply decayed organic material such as leaves, shredded yard trimmings, kitchen scraps, manure, and sometimes sludge (Bio Solids)



# Pros of composting

- Good way to recycle
- Environmental benefits regenerate poor soil, prevent erosion, degrade chemicals in wood and the soil itself, and reduces the need for fertilizers.





# Benefits of compost

- Supplies nutrients to plants
- Reduces the need for chemical fertilizers
- Holds water
  - For every 1% increase in organic matter in the soil, water-holding capacity increases by ~20,000 gallons per acre
- Reduces erosion
- Filters storm water



# Cons of composting

- Equipment and effort required the proper equipment, time and effort is needed to make sure the compost comes out right.
- If the pile is not processed and turned frequently you will get bad smells and attract rodents and other pests.
- Is it Safe?
- All this equipment and effort costs money.



# Composting vs. Landfill

- Did you know that about 80% of what is disposed of in landfills is compostable?
  - Argument well it will just decompose in the landfill.
  - Answer yes it will decompose in the landfill however this is a anaerobic (without air) process which produces methane gas. Also, you can not return the material to the soil.



# Types of composting

 Static pile – without turning, needs air pumped into pile. This process is best for small scale composting.





 Windrow – in a long row that is turned frequently during the process. This process is best for larger scale composting.





 In vessel – contained inside a container. This process is best if odors and pests are an issue.







 Vermicomposting – With worms. This process is great for small in home composting and education but can be done on a large scale.





### Money – It's all about the money.

- Composting can cost a lot of money but can also generate income to cover those costs.
  - On average 1 cubic yard of Class A compost can sell for anywhere between \$50-\$100.
  - To produce compost a facility must be registered with the New Mexico Environment Department.
  - To sell compost a seller must be registered with the New Mexico Department of Agriculture.
  - Note: Compost is not solid waste and does not fall under the same regulations as solid waste.



# Permitting / Registration

- To produce compost a facility must be registered with the New Mexico Environment Department.
  - Los Alamos County already has a registered compost facility. This registration included the ability to compost food waste.
- To sell compost a seller must be registered with the New Mexico Department of Agriculture

 Note: Compost is not solid waste and does not fall under the same regulations as solid waste.



### Santa Fe Bio Solids Compost Facility









# Questions?



Agenda No.:	
Index (Council Goals):	
Presenters:	Lisa Bakosi
Legislative File:	11905-19

#### Title

Zero Waste Team - Food Waste Reduction for Los Alamos Restaurants

#### Body

**Restaurant Waste**: The Zero Waste team focused on restaurant waste, visited many of the 26 Los Alamos/White Rock restaurants to understand how to help reduce (primarily) food waste. Again, the bottom line compels restaurants to order food and measure portions for the least waste, and many would like to recycle and compost, but they could use more help.

All businesses (and dare we add, households?) need education as to what's recyclable and what's not. As Tiffany Pagoda says, **"Wishcycling is** *not* **recycling!"** Just because you want something to be recyclable, doesn't mean it is. "When in doubt, throw it out" rather than contaminating the entire recycle stream.

Restaurants are eager for the County's proposed food-waste composting, and they want the County to re-offer energy audits to give them both a clear indication of current energy use, but a baseline for comparing progress. For now, if you have pigs, goats, or chickens, you can arrange with a restaurant to pick up their food waste.

As for restaurant waste, most don't have much uneaten food, but if there were, it would be nice to have a service organization or church pick up the food: at Ruby K, one of the Los Alamos Living Treasures picks up leftover bagels to take to the High School.

They want more recycle dumpsters more conveniently located nearer, cardboard recycle for every business, for bars, near-site glass recycling, and more frequent pickup of all recycle. The County charges for recycle; dedication to green costs the business money.

Plastic/disposables waste? Melissa Paternoster of the Blue Window has recommendations for restaurant managers. Education, reduction, replace plastic with biodegradables: (1) proper food purchasing, (2) attention to portions, (3) menu flexibility to repurpose tomorrow what isn't cooked today, (4) no unrequested straws (so far, any straw solution costs five-times more than plastic), (5) biodegradable take-out boxes, and ask if the patron wants utensils (only biodegradables). (7) Initiate the County-wide composting ASAP.

Restaurants would also like a county-specific Green Restaurant Certificate to reward them for the surprisingly expensive, complicated, and strenuous required to be an Earth-friendly eatery.

Attachments

N/A



Agenda No.:	
Index (Council Goals):	
Presenters:	Angelica Gurule
Legislative File:	11907-19

#### Title

March 2019 Residential Sustainability Report

#### **Recommended Action Motion**

N/A

#### Body

The ESB will review and discuss the March 2019 Residential Sustainability Report. The data now includes more data and graphs that will demonstrate overall diversion as a result of the new yard trimming program which began on July 9, 2018.

The yard trimming collection began on March 18, 2019.

Most recent additions to the report include greenhouse gas emissions reduced by recycling and composting.

#### Attachments

E - Residential Sustainability Report - March 2019



### **Residential Sustainability Report**

Service Period: March 2019





Mar-19

33.37

92.64

392.79

### March Diversion Rate: 24%

The diversion rate is the percent of recyclable and compostable material diverted from the landfill.



#### In March by recycling and composting Los Alamos County reduced GHG emissions by ~384 tons





For more information contact Environmental Services Division at 505.662.8163 or email solidwaste@lacnm.us