

## **Agenda**

RI Solid Waste Management Plan (SWMP) Advisory Committee

May 21, 2013 @ RI RRC – Johnston, RI - 9:00 AM – 12:00 PM

- I. Introductions
- II. Roles & Responsibilities
  - Working Group Members
  - Advisory Committee Members
  - Other Stakeholders
- III. SWMP State Approval Process
- IV. RRC Presentation: “State of the Waste Review”
- V. Community Engagement Strategy
  - Time Line
  - Topical Work Sessions
  - Public Forums
- VI. Advisory Committee Survey
- VII. Schedule meeting dates/times for the Advisory Committee



# Statewide Solid Waste Plan Update-Element 171 State of Waste Review

Advisory Committee Review May 21, 2013

**Recycling.  
e it second nature.**

Michael OConnell, Executive Director  
Rhode Island Resource Recovery Corporation

# Presentation Purpose:

- Overview of Regional Solid Waste Market and RIRRC Solid Waste and Recycling Trends
- Review strategies that optimize RI's solid waste facilities and financial resources in the best long term interest of Rhode Islanders.
- Examine the environmental opportunities available to Rhode Island as we transition to the next stage of solid waste management

# Plan Vision-2035:

To be truly sustainable, Rhode Island must invest in full-scale residential composting facilities. We must make organics management a top statewide priority. This will remove 30% of the waste from the waste stream, and will generate much needed energy. We must continue to invest in manufacturing processes that use recyclables as feedstock and provide long-term high-quality jobs. We must implement the best state of the art technologies and public policy practices to maximize the remaining years of the central landfill, increase the remaining usefulness of the Materials Recycling Facility, and begin the transition to the solid waste management practices that will take Rhode Island into the 22<sup>nd</sup> century.

# Plan Goals:

- Goal 1: Significantly reduce the amount of RI generated solid waste requiring disposal through increased source reduction, reuse, recycling, and composting.
- Goal 2: Manage the solid waste that ultimately must be disposed in an efficient, equitable, and environmentally protective manner, consistent with the established solid waste hierarchy.
- Goal 3: Adopt stable, long-term funding mechanisms that provide sufficient revenue for state, regional, and local programs while providing incentives for increased waste reduction and diversion.

# Regional Solid Waste Market

## New England Solid Waste Disposal Capacity (Annual Tons) (ME, NH, MA, CT, and RI)

	Landfill	WTE	Supply Total	Demand	Excess Capacity
2008	5.9M	6.7M	12.6M	~ 12.6M	None
2015E	5.0M	6.7M	11.5M	~ 10.0M	+1.5M

### Observations:

- Current regional waste generation in the 10 million ton range.
- Market overcapacity will keep pricing unstable.
- Key Drivers affecting overall supply/demand:
  - » Economy and waste generation
  - » Transportation costs
  - » New legislation
  - » New technology
  - » Recycling markets

## Rhode Island Market Dominated By Regional Incinerators

	Number of Incinerators	Percent Incinerated	National Rank
Connecticut	6	65%	1
Massachusetts	7	34%	2
United States	87	7%	N/A



# Waste To Energy

## Economics/RIRRC Position

- Capital costs of \$200,000/ton of installed capacity = **\$400 million** for a 2,000 ton facility.
- Tipping fee ~\$99-\$111/ton (per study by GBB)
- RIRRC is open to utilizing WTE technology under the following conditions:
  - Meets regulatory requirements.
  - Uses proven, not experimental, processes.
  - Must be economically attractive to municipalities.

# Regional Solid Waste Market in Conclusion

- Waste Disposal currently a buyer's market.
- No opportunity for RIRRC to raise prices and increase cash flow.
- No new greenfield WTE plant built in 18 years.
- Incinerators are price leaders, landfills are price followers.
- Potential now exists to lock up relatively low disposal prices for major long term commitments of solid waste volumes.

# Rhode Island Resource Recovery Corporation



Quasi-public state agency, established in 1974, charged with managing the state's solid waste and recycling program by meeting high industry standards for recycling and waste disposal, and using the best mix of public and private processing, recycling and disposal systems, programs, and facilities for both commercial and municipal waste in order to meet Rhode Island's needs. *RIGL 23-19*

# Current Mission/objectives

**Mission**: Provide safe, environmentally compliant, clean, and cost effective solid waste and recycling services for all Rhode Islanders.

## **Key Objectives**:

1. Work collaboratively with stakeholders to increase recycling and diversion to make RI a greener and healthier place to live.
2. Continue to increase the life of the landfill in order to provide long term significantly reduced waste disposal costs versus the market for all municipalities.
3. Remain financially self-sufficient funding all operational and capital requirements from fees.

# Key Business Trends

Category	Actual Fiscal 2007	Actual Fiscal 2008	Actual Fiscal 2009	Actual Fiscal 2010	Actual Fiscal 2011	Actual Fiscal 2012
<b><u>Statistical</u></b>						
Solid Waste Tonnage (millions)	1.1	1.0	0.6	0.7	0.7	0.6
Remaining Landfill Life (years)	15.5	16.0	24.0	20.2	19.3	21.1
Number of Employees	129	121	99	97	95	93
Recycled Tons (000)	91	97	99	97	99	97
Leaf & Yard Waste Tons (000)	44	40	38	40	37	39

# Key Financial Trends

(All In Millions)

	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Projected 2013
Revenues	\$69.8	\$66.9	\$45.5	\$48.8	\$51.9	\$45.9	43.8
Operating Expenses	<u>-66.5</u>	<u>-61.7</u>	<u>-49.5</u>	<u>-43.4</u>	<u>-42.8</u>	<u>-35.6</u>	<u>50.3</u>
Operating Income	3.3	5.2	-4.0	5.4	9.1	10.3	-6.5
Transfer to State of Rhode Island	-3.3	-5.0	-7.5	0.0	0.0	-3.5	0

# Major Capital Outlays

Sewer Infrastructure,  
Leachate Pre-Treatment

\$35-\$40M

- New state-wide limits for nitrogen
- Currently no limits for RIRRC
- Requires an on-site treatment plant
- Expenditures in FY14 and FY15

Landfill Expansion Phase VI

\$95-\$100M

- Approximately \$5M/year over 20 years
- Covers demolitions, site prep, construction, roadways, double base liner, leachate system, scale house relocation etc.

Ongoing

\$7-10M/Year

- Capping, Landfill Construction and Replacement Capital

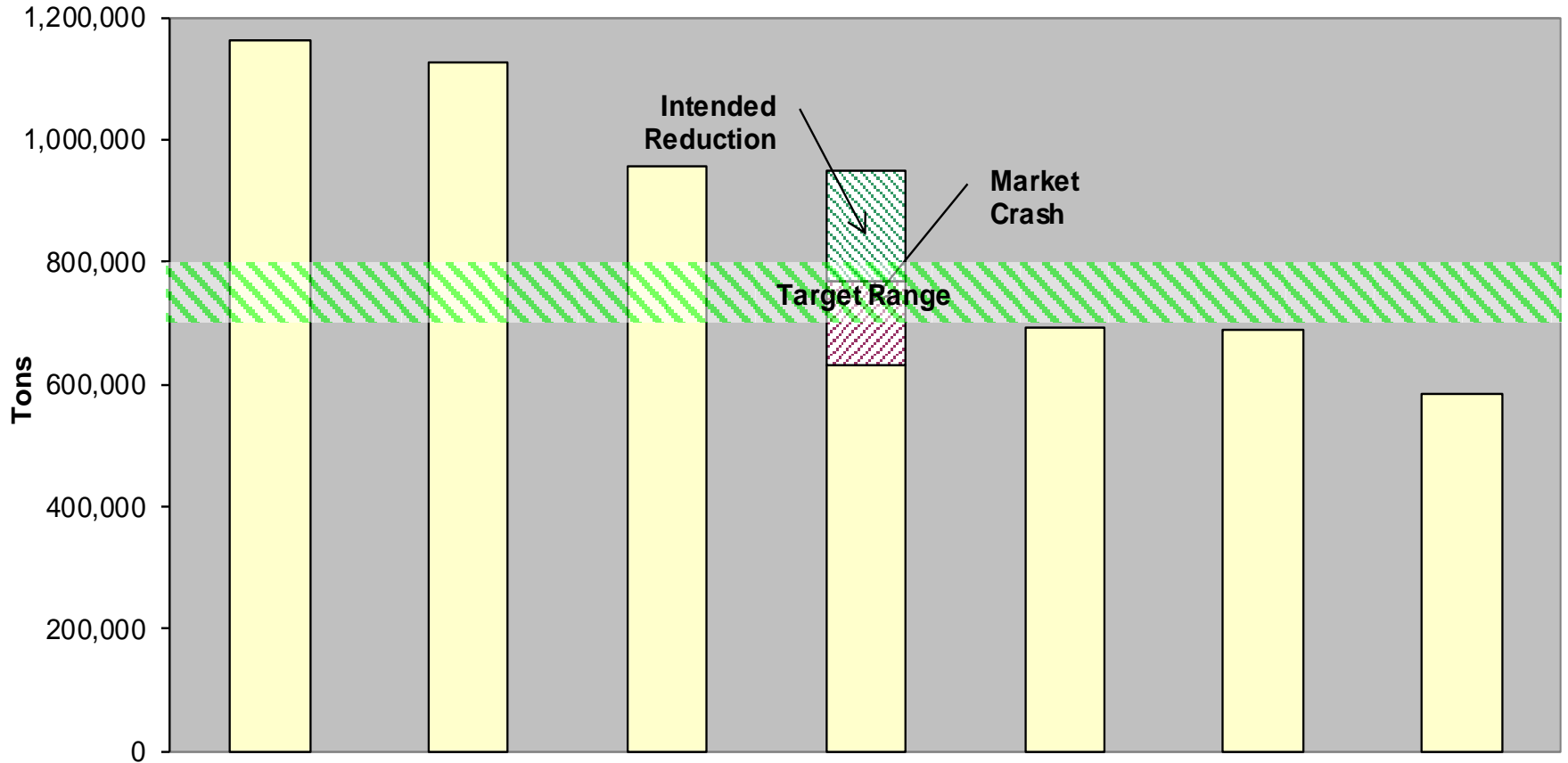
## RIRRC BUSINESS SEGMENTS (ex MRF) With Controlled Pricing

<u>Segment</u>	<u>F12 Tip Revenue</u>	<u>Price Set By</u>
Municipal Solid Waste	11.0M	Statute
Commercial Solid Waste	13.1M	Market
Leaf and Yard Debris	0.3M	Statute
Eco-Depot	0	Practice
Construction Debris and Other	5.8M	Market/Statute
<hr/>		
Total Charges for Services	\$30.2M	
MRF Recyclables	0	Statute
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Grand Total	\$30.2M	
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\*Greater than 50% of services offered by RIRRC have fees or volumes controlled by statute.



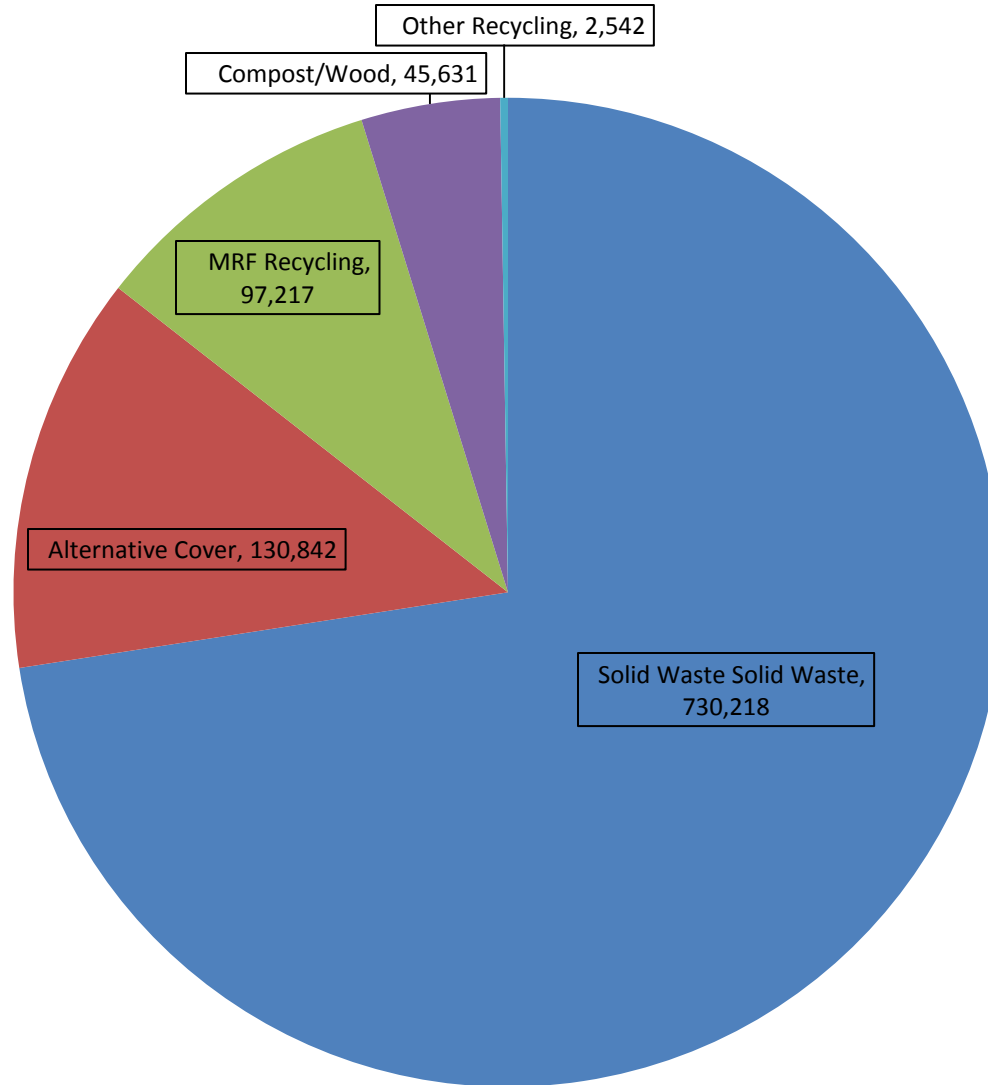
### Solid Waste Loading\*



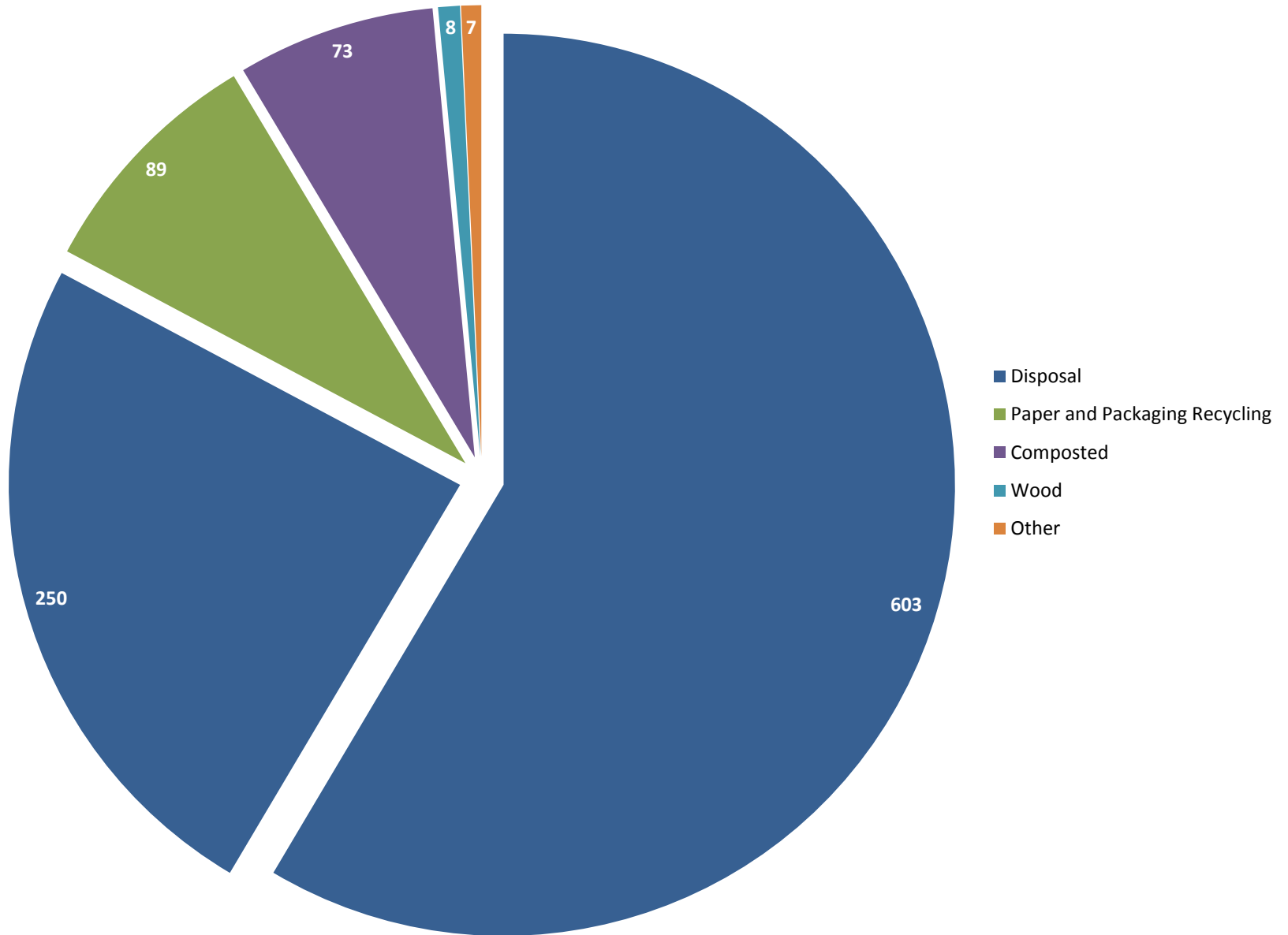
	Fiscal 2006	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011	Fiscal 2012
Total	1,161,711	1,124,221	955,284	629,800	690,879	687,393	583,413
% Change vs Prior Year	NA	-3%	-15%	-34%	10%	-1%	-15%
Avg. Cmrc'l Price		\$51.83	\$54.92	\$60.67	\$52.92	\$50.24	\$49.83

# Delivered Tons To RIRRC

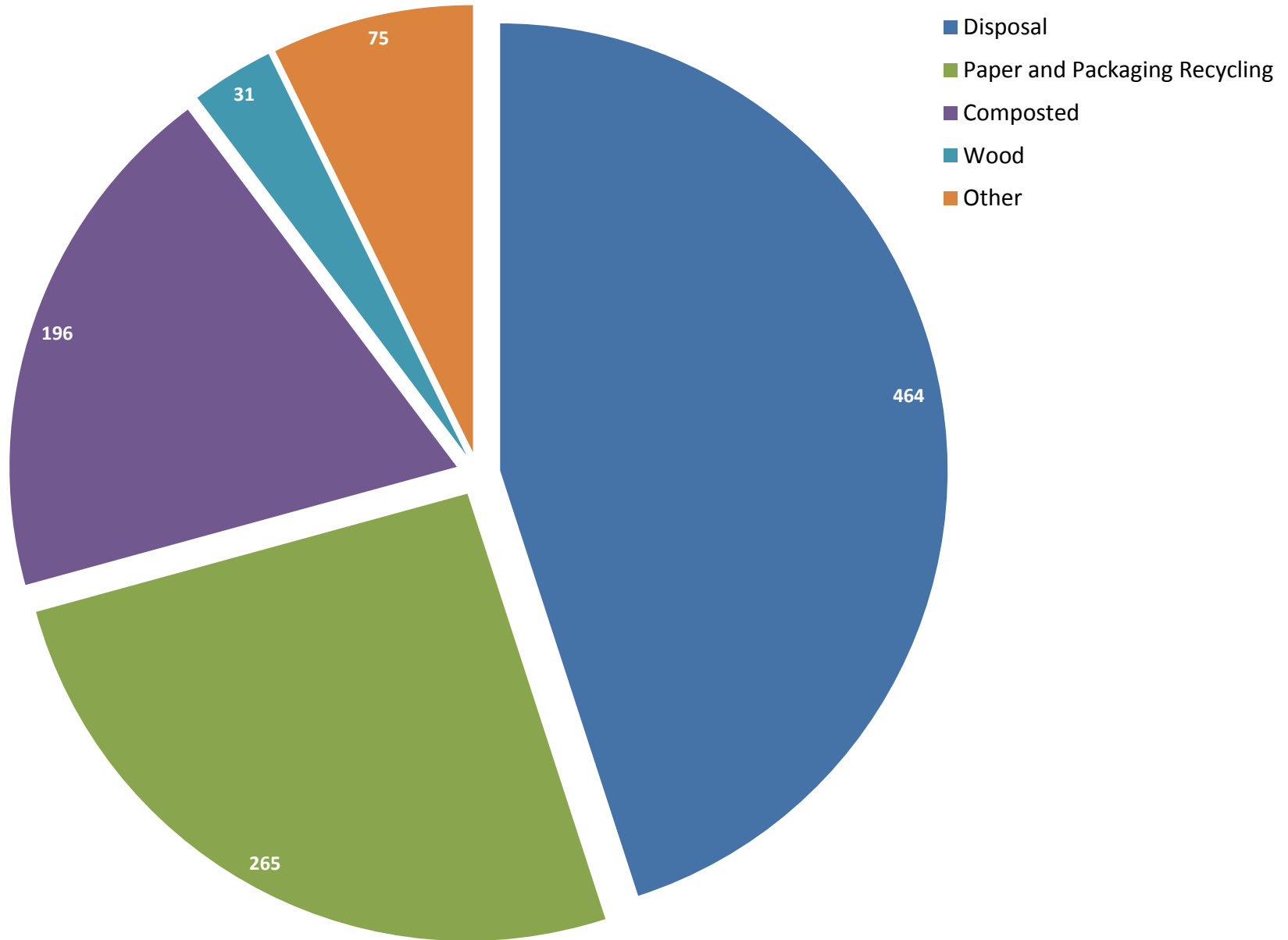
## Fiscal Calendar 2012



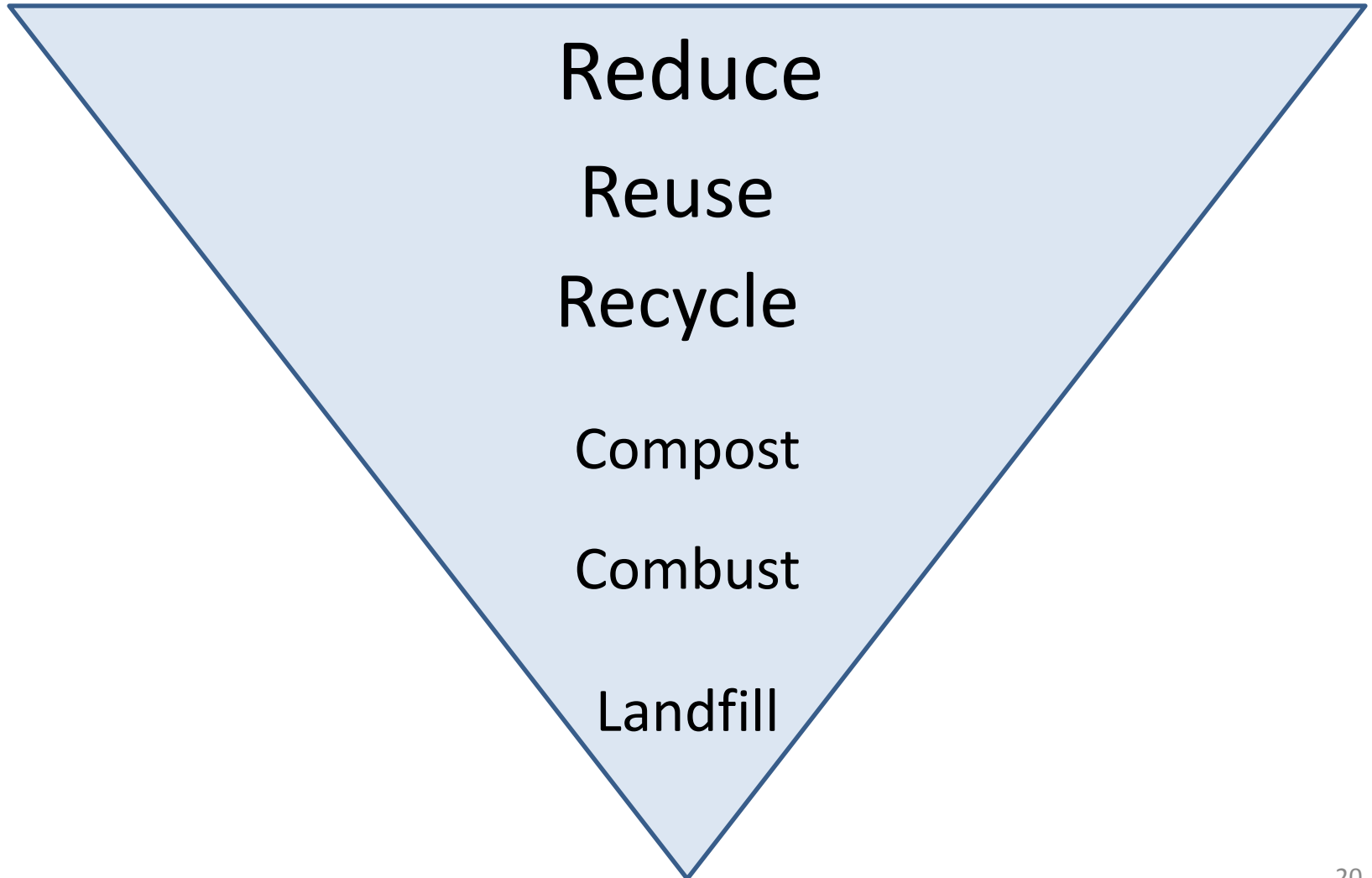
# Estimated Current Disposition of RI Solid Waste (K tons)



# Potential Disposition of RI Solid Waste (K tons)



# EPA Waste Hierarchy



# Municipal Costs & Opportunities

- Bulky Wastes
  - Mattresses; Scrap Metal; Appliances; Tires
- Extended Producer Responsibility
  - Mattresses; Paint; Unwanted Medications; Carpet
- Leaf & Yard
  - Local composting areas; Backyard composting
- Automated collection
  - Large wheeled carts for recycling, smaller carts for refuse
- Pay As You Throw
  - Treat trash and recycling as a utility; Use (create) less, pay less.

# Strategic Options to Extend Landfill Life

1. Become primarily a municipal disposal/recycling facility.
  - Municipalities = shareholders
2. Develop specific programs to further divert materials from disposal.
  - Extended Producer Responsibility
  - Maximize municipal transfer stations, recycling centers
3. Utilize technology that meets RIRRC stated objectives.
4. Before landfill closes, develop long term/cost effective contracts with regional incinerators/transfer station owners to ship RI municipal sector solid waste out of state.

## Notes

### RI Solid Waste Management Plan (SWMP) Advisory Committee

May 21, 2013 @ RI RRC – Johnston, RI - 9:00 AM – 12:00 PM

The group began with a bus tour of the RRC facilities and landfill.

#### I. Introductions

The meeting began promptly after the bus tour, at approximately 10:20am. Each person was asked to introduce him or herself and explain why they were interested in serving on the Advisory Committee.

#### II. Roles & Responsibilities

The three members of the Working Group, RI Resource Recovery Corporation (RRC), Department of Environmental Management, Office of Waste Management (DEM-OW) and the RI Statewide Planning Program (SPP) each introduced themselves and explained their role in the planning process. All three offices have signed a Memorandum of Understanding laying out their roles and responsibilities (posted to the Division of Planning website). In brief, RRC is the project lead and primary author of the SWMP, with assistance and support from DEM-OW and SPP. DEM-OW's major function in the area of solid waste is regulatory and consists of the following: Licensing and compliance monitoring of solid waste facilities; Developing, promulgating and administering the Regulations for solid waste management facilities, composting facilities and recycling; Cooperatively working with RIRRC and Statewide Planning to prepare the RI Comprehensive Plan. It is important to note that many times the public believes the DEM has authority to determine where a facility should be sited and whether or not a facility and its capacity is needed within the State of Rhode Island. Neither is under the purview of the DEM. Furthermore, we do not have the authority to regulate solid waste haulers. Finally, SPP is the keeper of the State Guide Plan, under which the SWMP will be an element. SPP will help ensure the SWMP meets the standards for a State Guide Plan Element and is prepared to go through the State approval process. SPP will also ensure that the plan contains clear guidance for municipalities to address solid waste in their Comprehensive Community Plans.

The role of the Advisory Committee is threefold: 1) to review and comment on draft outlines and draft plans to ensure their various perspectives are considered, 2) to help identify and reach out to other stakeholders in their networks who ought to be engaged in



the planning process, and 3) to help promote participation from other stakeholders and the general public.

Each Advisory Committee member received a handout explaining the roles and responsibilities of the Working Group, Advisory Committee, and other stakeholders.

### III. SWMP State Approval Process

SPP explained the process of approving a State Guide Plan Element, from ensuring the document meets all necessary requirements, to review and approval from the RRC Board, the Technical Committee to the State Planning Council, and the State Planning Council itself.

### IV. RRC Presentation: “State of the Waste Review”

RRC gave a presentation on the history, market trends, and future goals for solid waste management in Rhode Island and the region. A copy of this presentation will be posted on the Division of Planning website).

### V. Community Engagement Strategy

A draft time line was shared with the Advisory Committee, laying out the expectations for the next 18 months. It is expected that members will review a draft outline of the SWMP this summer, and help make sure we are covering all of the topics necessary and gathering the most useful data. Also over the summer, Working Group members will be reaching out to other stakeholders identified by the Advisory Committee and others with presentations, interviews and other meetings to lay the groundwork for a series of public forums. The public forums will be an opportunity to get broader input from the public on the plan topics and strategies, as well as to educate the public about current efforts and resources related to recycling, composting, etc. In between forums and Advisory Committee meetings, we will schedule a series of topical discussions on specific areas of interest, such as the future of the landfill, waste to energy, producer responsibility, etc. so that everyone interested has an opportunity to delve deeper into these topics.

### VI. Advisory Committee Survey

Each committee members was asked to fill out a survey answering the following questions: 1) What do you hope this plan will accomplish? What will be different/better once the plan is implemented?, 2) What data/information do you feel is missing?, 3) Beyond the advisory committee, who else needs to be involved (groups and individuals)? The results of this survey will be shared with the Advisory Committee.

VII. Schedule meeting dates/times for the Advisory Committee

The committee agreed that Tuesdays at 9am are generally good for them. SPP will find specific Tuesday mornings to schedule Advisory Committee meetings and will share with the group. Suggested meeting dates are: September 10, March 11, July 8, November 18.

The Solid Waste Management Plan web page on the Division of Planning website can be found at:

<http://www.planning.ri.gov/statewideplanning/land/solidwaste.php>

**Rhode Island Solid Waste Management Plan Advisory Committee Survey**  
**May 21, 2013**

**1) What do you hope this plan will accomplish? What will be different/better once the plan is implemented?**

**Most Frequent Themes**

- Extend the life of the landfill
  - Do so with a particular emphasis on recycling and composting
  - Establish a clear process for accomplishing goals and policies, and continually evaluating alternatives, measures of success, new technologies, etc.
- 
- “I hope this plan will assist the state with a vision on how to reduce the amount of valuable resources we are sending to the landfill. Great work on the 2035 Vision. Look forward to learning more.”
  - “Provide a cleaner vision and strategic plan for waste disposal, recycling and diversion to extend life of central landfill.”
  - “Provide a forum for discussion with the Town of Johnston as the host community so that the town can also plan for RIRRC reuse in long-term (22yrs). Provide understanding for host community for implications of anaerobic digestion (as a means of increasing land fill capacity).”
  - “Strategy for sustainable solid waste management systems over life of central landfill. Better informed, engaged, and functioning constituency participating in solid waste management process. Better systems and infrastructure to accomplish solid waste management goals.”
  - “Identify actions by RIRRC/DEM/General Assembly to establish priorities for solid waste management for RI. Set ambitious goals for waste diversion/recycling/composting efforts along with source reduction and reuse operations and policies. The plan needs to also consider practical processes for reviewing policies and decisions to be aligned with declared priorities.”
  - Extend the life of the landfill. Increase recycling and diversion. Develop strategies for managing organics.”
  - “A truly sustainable strategy for waste management for the state. The new plan should have a strong focus on new technologies and resources for communities on evaluating.”
  - “Make the producer of trash pay, including households, and thus increase separation of recyclables. Future revenues - Include opportunity costs in fees in waste management.”
  - “Clearly map the strategy to achieve the plan goals; Define goals and measurements; Provide a process for continuous review of alternative technology; BMP’s for municipalities/commercial generations.”
  - “ID clear strategies for extending the life of the landfill; ID the disposal options that will be available to the state post-Phase II; Set the path for the evaluation of those options.”

- “As a whole we are missing the boat locally and nationally regarding composting and the ability to extract a great deal from the landfill. Very enthused to see this on the horizon.”

## 2). What data/information do you feel is missing?

### Most Frequent Themes

- Results of a Waste Characterization Study
  - More data on economic analysis, financial impacts, commodity markets, etc.
  - Information on new technologies
- “It will be helpful to get a copy of the presentation to review in more detail (financials, etc.). It would be helpful to hear if you think a Waste Characterization Study will be completed soon. It would also be more helpful to get more info on composting.”
  - “Won’t know until the draft SWMP is reviewed!”
  - “Renegotiation of the host community agreement (I believe the current agreement expires in the next 5 years) as one of the fiscal impacts.”
  - “Waste Characterization (update); Regional economic analysis of diverted waste streams and recycled commodities; Detailed modeling of scenarios/alternatives.”
  - “Methane gas generation/capture and sources of this gas. Waste characterization study for residential vs. commercial waste. Overview of municipal policies currently in place and how that has affected waste generation/diversion. Energy/water usage at the entire RIRRC facility. Historic commercial tipping fees, and overview of commodity market fluctuations for our captured recycling.”
  - “Exploring WTE and other non-landfill options. Exploring organics management (i.e. anaerobic digestion).”
  - “As noted above, resources and info on newer commercial technology.”
  - “Markets for recyclables geography/demand/price/development for local economy; who does pay and how is it working?”
  - “Population growth for region; Glossary of alternative diversion/processing technology; Financial projections based on varying inbound volumes; Most recent SWMP.”
  - “Better waste composition data.”
  - “Info regarding rumored composting facility near landfill. Is this part of the plan associated with RIRRC?”

### 3). Beyond the advisory committee, who else needs to be involved (groups and individuals)?

- “I recommend getting a diverse group of stakeholders involved. Similar to the Social Equity Advisory Committee for the Sustainable Communities work. In light of the fact there is a 20 year timeline estimate for the landfill, there is a great opportunity to get youth throughout RI involved.”
- “Not sure there are others that need to be involved at this time.”
- “Johnston Town Council; Pam Sherrill, Johnston Town Planner”
- “Sustainable Communities; Curt Spalding (EPA Region 1); Building code and health code representatives to address issues of commercial/multi-family facilities (waste storage).”
- “Amelia Rose, Environmental Justice League [amelia.rose@ejlri.org](mailto:amelia.rose@ejlri.org); Trish Jedele, Conservation Law Foundation [tjedele@clf.org](mailto:tjedele@clf.org)”
- “Get input from other states, countries, and regions regarding other technologies and solutions to waste management.”
- “Major business groups: tourism/hospitality Myrna George (South County Tourism), Greater Providence CoC, Dan Baudoin Providence Foundation, John Muggeridge Fidelity; Citizens and residents.”
- “Individuals/representatives involved in composting currently. Will forward some names and suggestions.”

#### **Additional Comments from Bob Vanderslice, Department of Health**

I think we have a real opportunity to address some of the issues facing solid waste management in a way that contributes to the health of RI residents.

#### **With respect to the public forums that are planned for the next year:**

- I advise against holding any public forum in which the speakers and decision makers at the front of the room look appreciably different from the people in the audience. I encourage you to meet with local community leaders and invite them to help lead or facilitate these meetings.
- I encourage you to take whatever action is necessary to try and achieve an audience that is representative of the community you are visiting.
- If your public forums consist of a bunch of white guys preaching to different communities across the State, you need to reconsider whether you are doing what you have set out to do.

## How do we use community input to create a plan for achieving the goal of greater composting and recycling?

- **Public Health perspective.** Greater composting and organic (paper, cardboard, etc) recycling can enhance urban agriculture and community gardening, reduce waste that contributes to climate change, etc. Community gardening can enhance social cohesion and contribute to community health.
- **The challenge of obtaining community input.** The people on the Advisory Committee are generally not experts on issues of composting and recycling, and may not necessarily provide guidance that will lead to creative or “envelope-pushing” solutions. The RRC's emphasis on practical solutions means that the solid waste guideplan will reflect the considerable knowledge of RRC staff, but may overlook novel means to achieve results that are deemed impractical from the perspective of RRC management. Something deemed impractical by RRC might be very practical if broad-based community support existed for innovative community-based solutions.
- **Resources to tap.** The RI Department of Health currently provides eight community groups with \$100,000/year for 3 years (\$2.4 million total) for community-based initiatives. Three of these grants include activities related to community gardening. These grantees are newcomers to the world of community gardening. In contrast, Southside Community Land trust and others have an established history that includes ventures that have ebbed and flowed over time. Their input would be valuable, as would input from Greg Gerritt, who organized a composting conference.

At the other end of the spectrum, RRC's desire to encourage ancillary industries to make use of the considerable volume of recycled materials (cans, paper, glass, etc.) at RRC should be of interest to a broad range of groups and EDC. This could have a direct tie in with Sustainable Communities. RRC understands the need for stable markets for recycled materials, and the opportunities RRC's recycled materials provide. Is there a way for RRC to pique the interests of the business community/EDC and engage the wide-range of groups interested in improving our economy to participate in guide plan development around recycling?