



**CommonWealth**

Resource Management Corporation

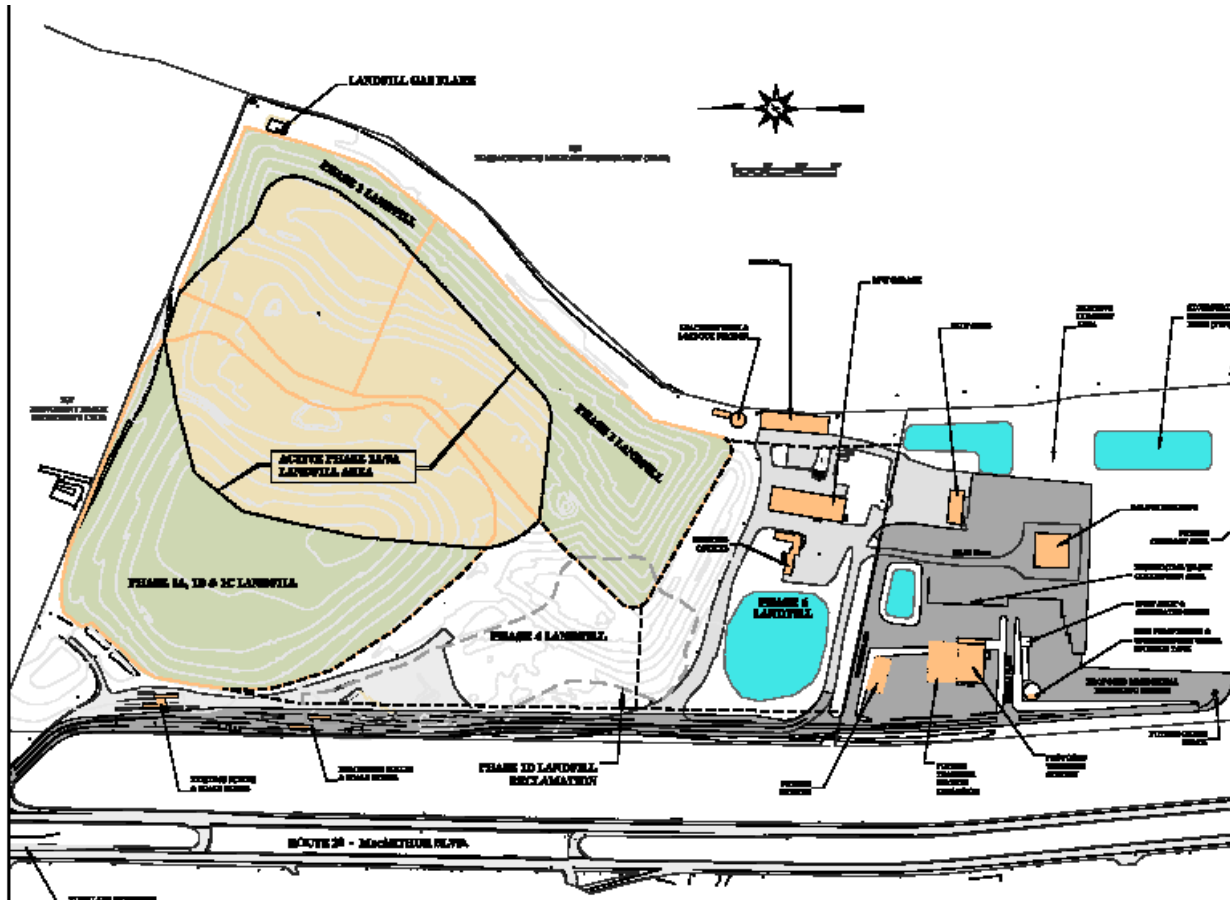
**The ISWM Business Plan:**  
**Future Opportunities for Bourne's**  
**Integrated Solid Waste Management Facility**  
Phase I: The Landfill Waste Acquisition Plan

**Presented to the**  
**Town of Bourne**  
**Board of Selectmen**

**11 May 2010**

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

ISWM today: a **solid waste enterprise** providing \$ for the Town



### ISWM Facilities

1. Landfill permitted for disposal of 219,000 tons/year (tpy)
2. Transfer station to handle C&D waste
3. Recycling center with baling facility
4. Compost/organics processing area
5. Landfill gas available for beneficial use
6. Infrastructure and space for more development

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

ISWM today: a solid waste enterprise **providing \$** for the Town



**Waste in:  
Dollars out !**

### ***Value of ISWM to the Town***

- \$ 400k+ in host fees (\$3.15 per ton in 2010)
- \$ 986k admin fees net of ISWM fringe (mostly collection)
- \$1,386k value: 20+ Town FTEs (at \$65k wage + fringe)
- \$ ~600k+ disposal value (6,000 tons MSW, 2,200 tons C&D/DTM)

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

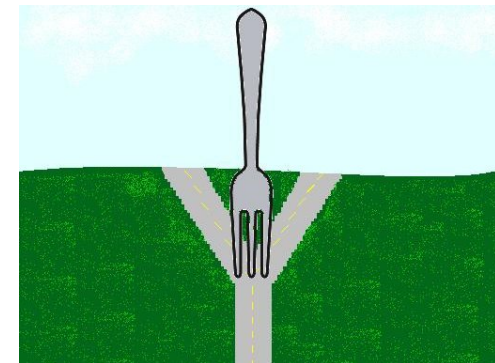
ISWM tomorrow: depends on choices made (or not made) today

### Phase I: The Landfill Waste Acquisition Plan

1. Acquire waste at tip fees that
  - Generate cash to meet targets
  - Maximize airspace value
2. Manage business risks

### Phase II: The Long-Term Site Development Plan

1. Manage Town waste after Landfill closes
2. Provide ongoing value for the Town

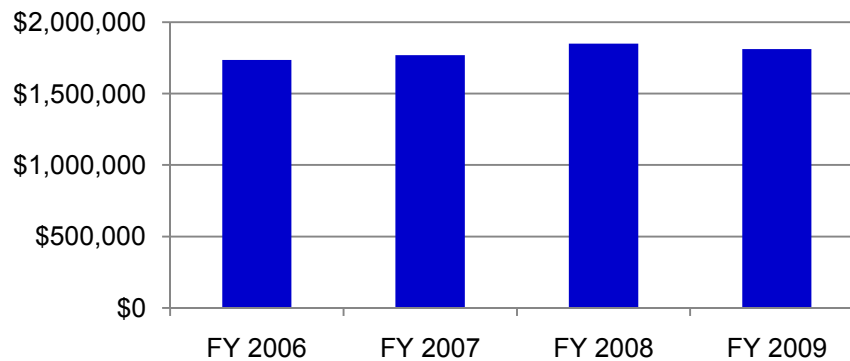


**ISWM at  
the fork in the road**

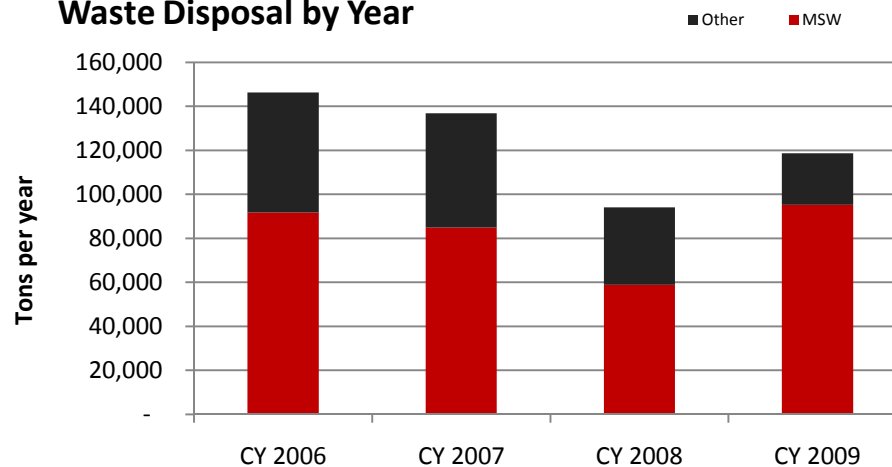
## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### Recent trends: waste disposal and value to the Town

**ISWM value to the Town**



**Waste Disposal by Year**



From 2006 to 2009:

- Stable value to the Town
- Competitive disposal market
- Decline in tons to Landfill (well below 219,000 tpy permit limit)
- Declines in revenues
- ISWM staff scrambled as market prices declined
- Lower tip fees preserved the customers vs. competition

*ISWM withdrew \$1.7M from Net Assets in FY2009*



**The ISWM Business Plan:  
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**ISWM revenues and value to the Town  
remain at risk due to**

- **Reliance on a few large customers**
- **Competition from other facilities**
- **Volatile disposal markets**



## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

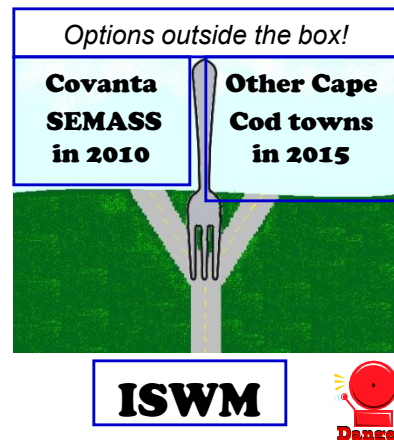
*Q: How can ISWM stabilize revenues?*

*A: Either diversify the customer base or enter into long-term waste commitments with stable suppliers.*

*Q: Where can ISWM get stable long-term contracts for waste?*

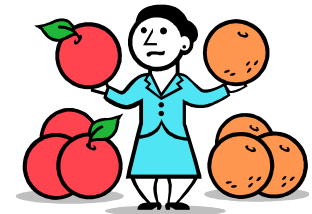
*A: Two nearby stable sources:*

- Processed bottom ash (PBA) from Covanta (SEMASS)
- MSW from other Cape Cod towns after 2015



## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

Q: *Which option is best?*



A: Does the Town prefer apples or oranges? Consider:

1. Landfill type:



Benefits and costs of an  
MSW landfill vs. a “dirt landfill”.

2. Facility life:



Landfill life, which depends on the fill rate.  
Site activity after the Landfill closes.

3. Financial goals:



ISWM revenue to meet expenses and reserves  
Town goals for host and admin fees  
Landfill type and life affect financial results



4. Risks and rewards:



What would the Town risk for extra value?  
What would the Town give up for stability?

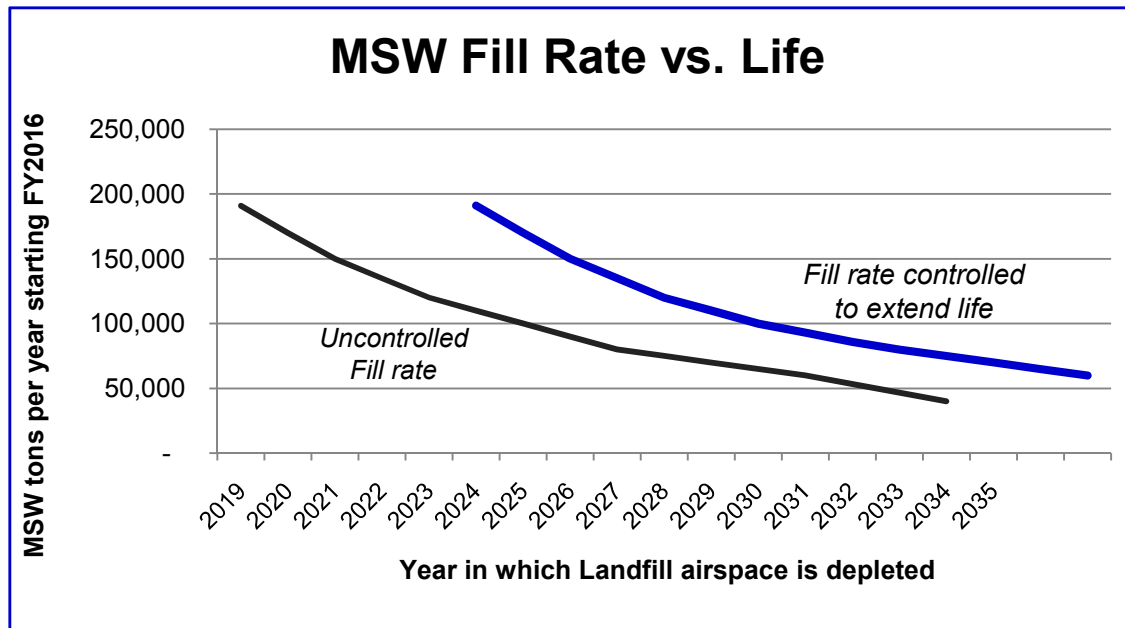


## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

1. Landfill Type	MSW Landfill 	"Dirt" Landfill 
Definition	MSW and other wastes that decompose (organics)	Ash, soils, inorganics, mixed and inert materials
Impacts	Control gas, leachate, odors and vectors Less dense (~1250 lbs/cy)	Less gas and odors to control, less overall effort More dense (~2000 lbs/cy)
ISWM LF 2009	95,239 tons MSW 80% of disposal	23,448 tons non-MSW 20% of disposal
ISWM LF 2015	MSW from Cape Cod towns	PBA from Covanta SEMASS
Tip fees	\$70-\$80/t MSW \$95/t gate rate	<\$20/t for some materials >\$50/t for choice materials
Revenue from airspace	\$44-\$50/cy MSW \$60/cy gate rate	<\$20/cy for some materials >\$50/cy for choice materials

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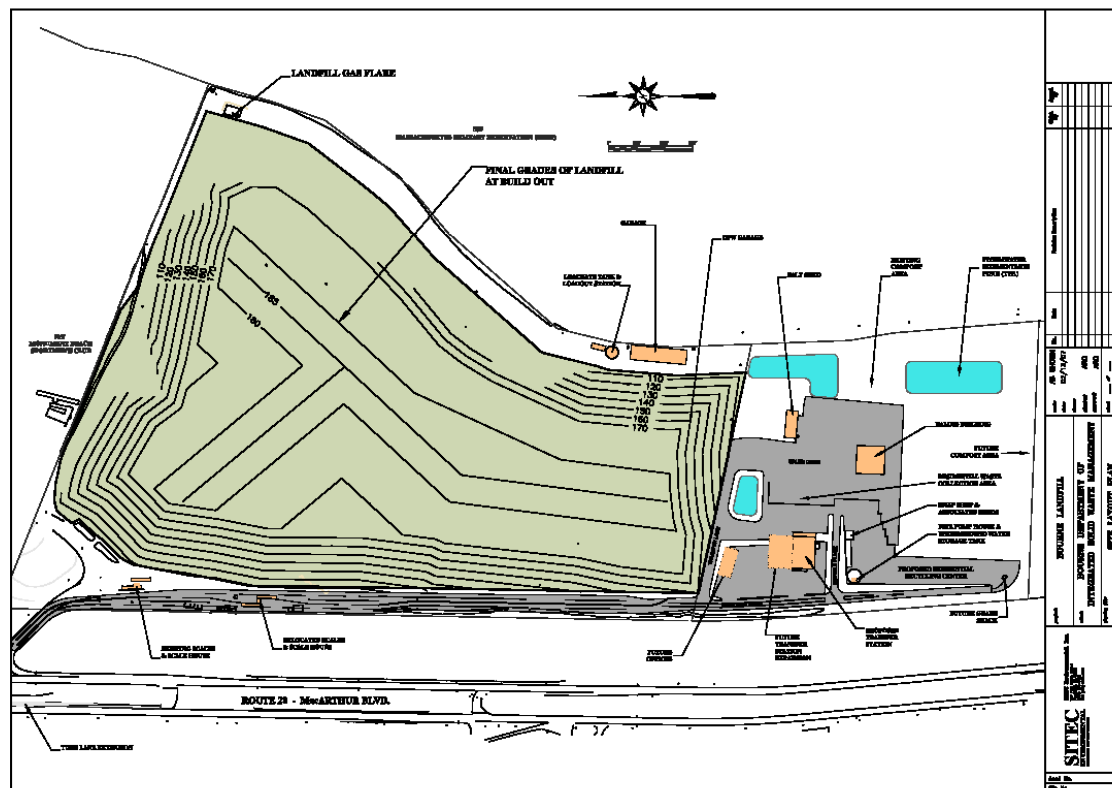
### 2. Landfill life: juggling dollars and time A faster fill rate means shorter life



***The Town can control the fill rate  
to meet planned contract needs***

# The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

2. Facility Life: The Landfill will close. The site can be active forever.



## Post-Closure Site Use

1. Leverage the transfer station
2. Add MSW processing
3. Add facilities for source-separated organics
4. Add landfill gas utilization facilities
5. Others to be determined

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### 3. Financial goals



ISWM uses revenue to pay, in priority order

- Direct operating expenses (feed the cow first)
- Indirect expenses (host fees + curbside)
- Debt service (equipment and cell/site construction)
- Closure reserves
- Other reserves (working capital)
- Bonus payments to the Town





Town uses the ISWM assets to

- Control Town disposal costs for the long-term
- Generate host and administrative fees
- Create long-term value

Business plan goal: evaluate options and stabilize for the future

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### 3. Financial goals: three possible examples of disposal scenarios

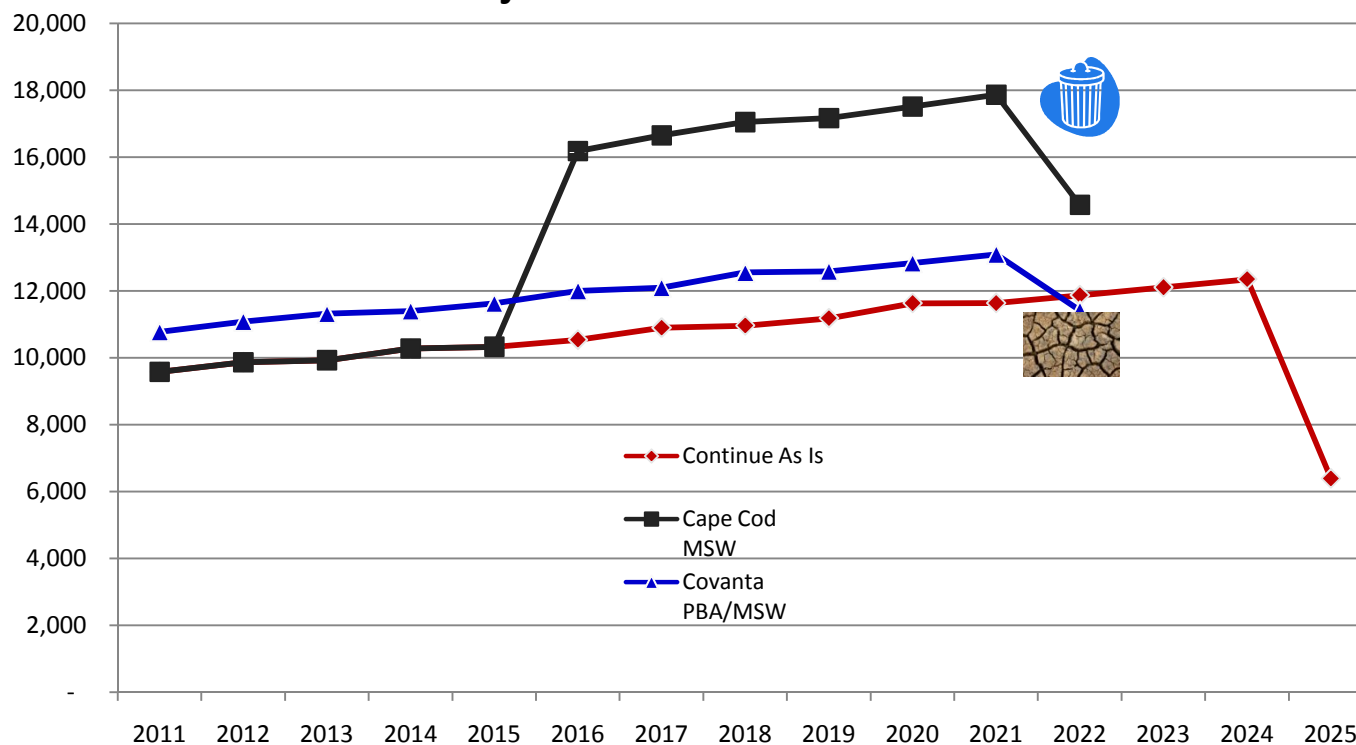
			
	Continue as is	Cape Cod MSW	Covanta PBA/MSW
Total tons accepted for disposal in period	128,000 tpy 1.85 M tons total	Up to 178,000 tpy 1.84 M tons total	219,000 tpy 2.59 M tons total
Type of Landfill	80/20 MSW/Dirt	Almost all MSW	Mostly "dirt"
Average density	1299 lbs/cy	1290 lbs/cy	1689 lbs/cy

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### 3. Financial goals: three possible examples of revenue scenarios




Projected ISWM Revenues



## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### 3. Financial goals: three possible examples of disposal scenarios

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Average density	1299 lbs/cy	1290 lbs/cy	1689 lbs/cy
			
Capacity used in Cells 2A/3A, 4 and 6	2025 to 2028	2022 to 2025	2022 to 2025
Period increase in ISWM Fund balance	\$8 to \$9M Most market risk	\$30M to \$45 M Hardest path, most reward	\$10M to \$12M Most stable, least risk

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### 4. Risks and rewards: findings

- MSW from Cape Cod towns offers the largest potential financial reward
  - Not available until 2015
  - Need interim strategy and long-term commitment (15 years)
  - Need strategy to provide service over full term
- Covanta PBA offers stability at reduced value
  - Need long-term commitment (10+ years)
- Planning horizons exceed five years
  - Leverage authorization for Town to negotiate 15-year contracts
  - Long-term considerations drive short-term plans
- Decision time is limited
- Leverage declines as the Landfill fills



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### 4. Risks and rewards: development opportunities

- Hybrid deal with Covanta and the Cape towns
  - Inter-municipal agreements with Towns, multi-service agreement with Covanta (MSW bypass, leachate, etc.)
  - Take extra MSW in summer, Covanta PBA in winter
  - Leverage the transfer station
  - Involve the Cape Light Compact for Covanta's electric output
- Develop remaining area on the ISWM site
  - Process mixed MSW
  - Process source-separated organics (AD, compost, etc.)
  - Develop other facilities
- Develop post-closure use of the Landfill
  - Solar PV electrical facility
  - Recreation or other

## The ISWM Business Plan: Future Opportunities for Bourne's Integrated Solid Waste Management Facility

### Next steps toward a decision

- Set goals, preferences and priorities
  - MSW vs. “dirt” landfill
  - Landfill life and site use plan (use the transfer station wisely!)
  - Financial goals
  - Risks and rewards
- ISWM to engage timely Covanta and the Cape Cod towns
  - Design a path for oversight and approval
- Town professionals to negotiate 15-year agreements subject to approval
- Refine a 5-year plan to achieve goals
- Control and keep with the process (suspend review of unsolicited bids)

