

The Future of Solid Waste Management on Cape Cod

**Understanding Options for Municipal Solid Waste
Processing, Disposal, and Recycling**

Assembly of Delegates August 19, 2020

**Barnstable County
Administration**

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**Barnstable County
Department of
Health and
Environment**

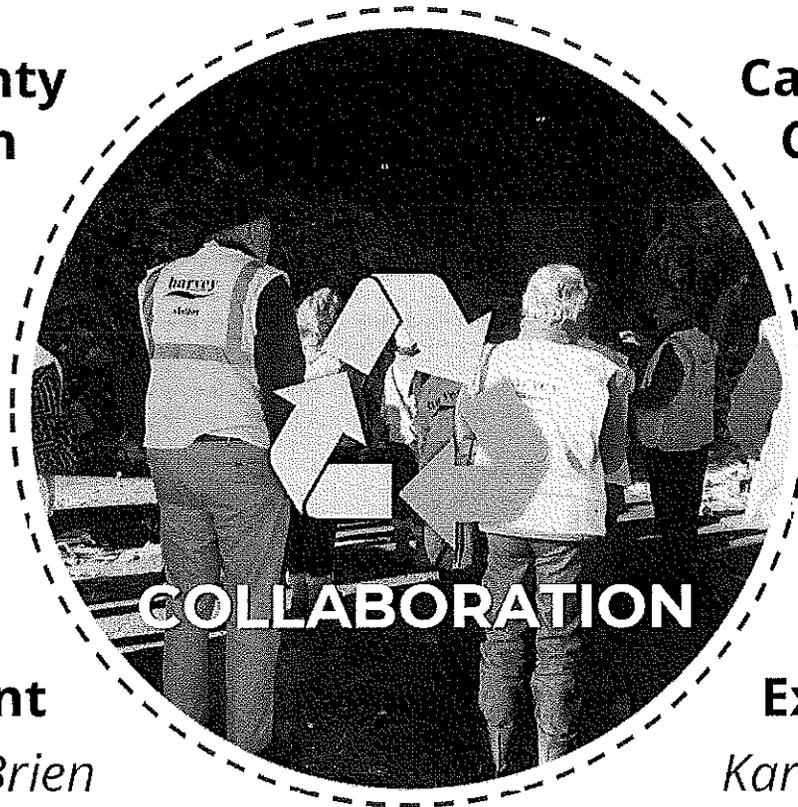
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**Cape Cod
Commission**

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**DEP/Cape
Cod Cooperative
Extension**

Kari Parcell



Background

- Municipal solid waste (MSW) disposal capacity decreasing throughout MA
- Recycling markets down
- 2030 SWMP Update projects decreasing disposal capacity in MA
- Challenges on Cape Cod
 - Towns seeing disposal contract prices increasing 2-fold
 - Limited markets for recyclables at this time

Need to address future disposal and options for waste diversion



Project



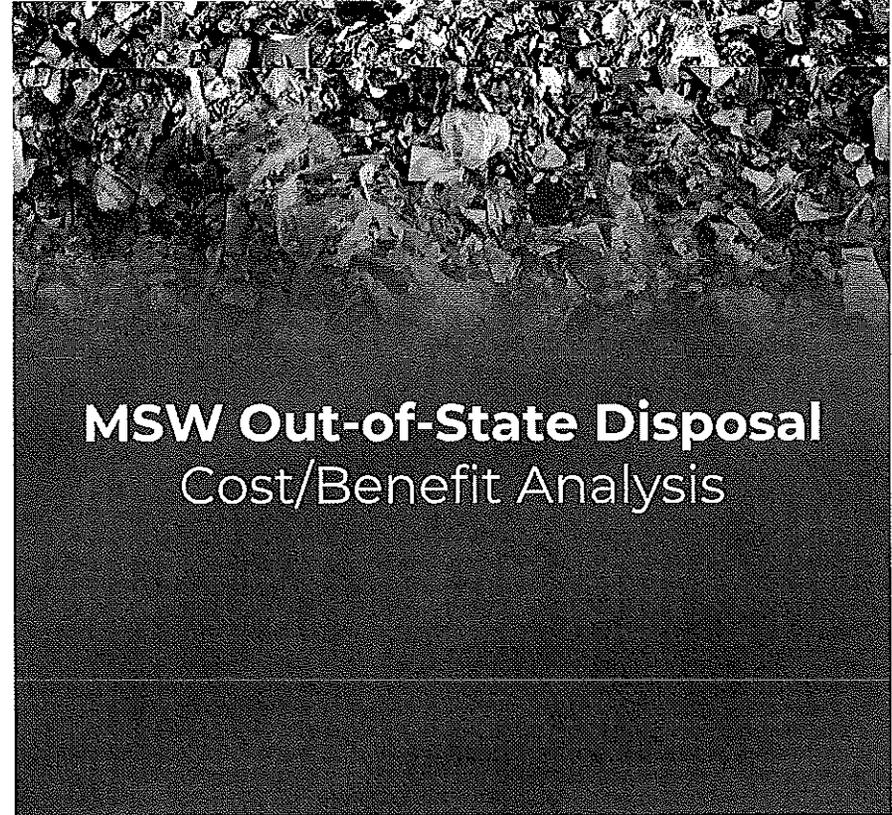
OBJECTIVES

- Support towns with their MSW management
- Reduce costs to towns and residents

GOALS

- Identify options for processing solid waste and recyclables on the Cape
- Identify opportunities for waste diversion, reuse, and new recycling markets
- Identify locations for potential future solid waste disposal

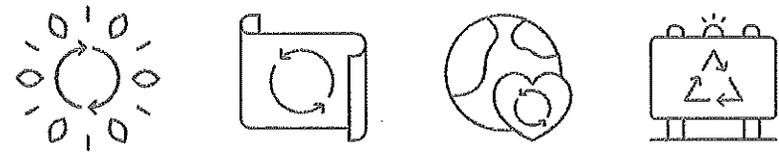
RFP for 2 Feasibility Studies



MSW Diversion Options for Recyclable, Reusable, and Hard to Dispose Waste Materials



This study will examine **options and costs to divert household recyclables and hard to dispose materials** (mattresses, textiles, etc.) **for reuse and recycling**, so that they are diverted from landfill or incinerator disposal



The study will examine **on-Cape options to collect and process materials for eventual reuse and recycling** and will identify potential markets for processed materials

On-Cape opportunities to collect, process for reuse or energy generation, and recycle materials at Joint Base Cape Cod UCRTS, the Bourne Integrated Solid Waste Management facility, and the Yarmouth transfer station will be examined

MSW Diversion Options for Recyclable, Reusable, and Hard to Dispose Waste Materials



WASTE STREAM COMPONENTS FOR ANALYSIS

- Organic food, leaf and yard waste
- Construction and demolition (C&D)
- Asphalt, brick and concrete (ABC)
- Textiles
- Mattresses
- Rugs and carpets
- Furniture and other bulky items
- Electronic wastes, including cathode ray tubes (CRT) and computer monitors
- White goods (appliances)
- Propane tanks
- Tires
- Fire extinguishers
- Clean wood
- Automobile wastes not including gasoline and antifreeze
- Batteries
- Compact florescent lamps (CFLs)
- Mercury and oil-based wastes

MSW Diversion Options for Recyclable, Reusable, and Hard to Dispose Waste Materials



DIVERSION SCOPE TASKS

Task 1 | Quantify and Characterize MSW and Components

Task 2 | Establish Focus Groups for Stakeholder Engagement

Task 3 | Identify Potential Beneficial Uses and General Processing Requirements

Task 4 | Identify Processing Facility Needs and Locations and Estimate Facility Costs

Task 5 | Identify Markets and Estimated Program Costs

Task 6 | Cost-Benefit Comparison, Recommendations, Presentations, and Presentation Materials

MSW Out-of-State Disposal Cost/Benefit Analysis



This study will **examine costs of disposing** of MSW out-of-state, and the **costs to transport** materials to the out-of-state disposal facility via truck and rail haul



Disposal materials do not include materials that have been diverted for recycling, reuse or other non-disposal disposition; this study looks only at materials that eventually end up in a landfill or incinerator



The scope includes looking at **on-Cape options for collecting and processing** disposal materials for transport to the out-of-state disposal facility(ies)

MSW Out-of-State Disposal

Cost/Benefit Analysis

DISPOSAL SCOPE TASKS

Task 1 | Quantify and Characterize MSW and Components

Task 2 | Disposal Options

Task 3 | Processing, Tipping and Transportation Options

Task 4 | Cost-Benefit Comparison, Recommendations, Presentations and Presentation Materials

Looking Forward

- County approval for funding
- Release RFP/Open Bids - **individual and combined**
- Hire consultant(s)
- Proposed Timeline for Completion: September 2021
- Presentation of final report to County officials

Access DEP grant funds to implement recommendations

