Shell Recycling: Exploring Potential Models for Connecticut

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2 Town of Fairfield
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5 Copps Island Oysters
6 Curbside Compost

Why Shell Recycling?

- Shell is the foundation of healthy oyster beds
- Healthy oyster beds provide ecosystem services:
  - Improve water quality
  - Provide habitat for marine organism
  - Provide shoreline erosion control
  - supply seed for aquaculture farms
  - Improve capture fishery production
- Shell in short supply

Motivations

Environmental (let's save the environment!)

Marketing (more customers, more oysters sold!)

Cost savings (costs money to throw away shell)

Financial incentives (e.g., tax breaks)

Hurdles to CT Shell Recycling

The state lacks a formal shell recycling program.

Costly to haul

Limited options for storing and curing

Required Agreements and Authorizations for Transfer Stations

Strict Regulatory Guidance for Curing

Exploring Potential Models

Model 1	Model 2	Model 3	Model 4	Model 5
				
Copps Island	Fairfield	Groton	CORR	Curbside Compost LLC
Farm	Town	Non-profit	Non-profit	For-profit

Model 1

Shell source	Farm
Collector	Farm
End User	Farm
Authorizations	Local, State
Pros	Supports single farm only
Cons	No public benefit

Model 2

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Shell source	Private/Public
Collector	Town (via Conservation/Shellfish Commission)
End User	Town
Authorizations	DABA, town (internal)
Pros	Town may cover some/all costs Town may be able to allocate space Lower transportation costs Local engagement
Cons	Volunteer-based (not financially sustainable) Limited Municipal Support

Model 3

Shell source	Private/Public
Collector	Non-profit
End User	Town
Authorizations	DABA, DEEP, Town
Pros	Town may cover some costs
Cons	Grant funded (not financially sustainable) Need agreements with town departments and shell sources

Model 4

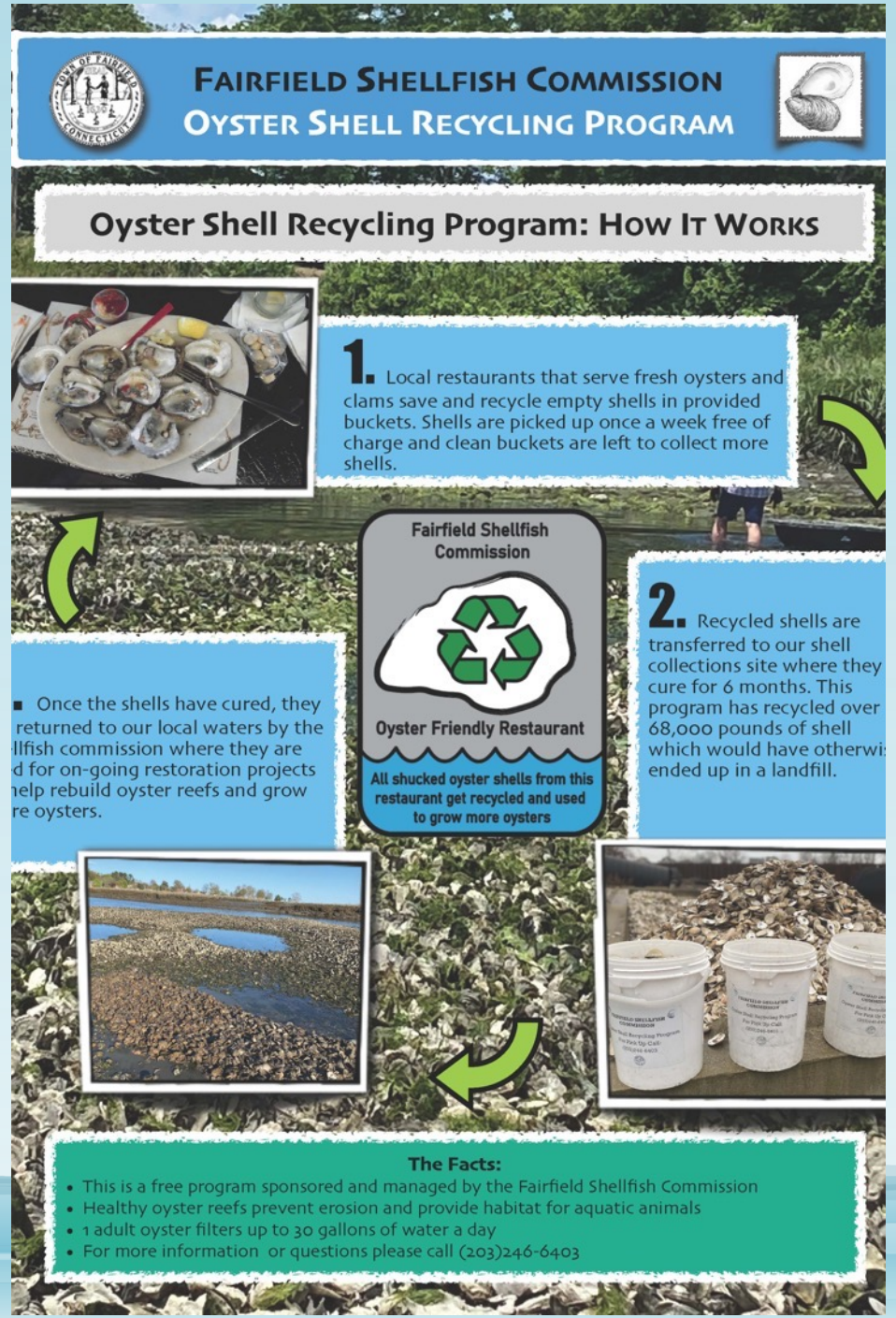
Shell source	Private/Public
Collector	Non-profit in partnership with town
End User	Town (default); non-profit
Authorizations	DABA, DEEP, Towns (multiple)
Pros	Assist towns with creating recycling programs Facilitate collection, transportation, and storage of shell Provide assistance with restoration projects and use of shell
Cons	Small scale start-up Funding challenges – grants private funding Maintaining long-term engagement with volunteers

Model 5

Shell source	Private/Public
Collector	For Profit
End User	For Profit
Authorizations	Local, State
Pros	Dedicated staff Limited regulatory agreements Established infrastructure Potential to reach individual households
Cons	No local financial or technical support No defined end user No local or state control over end use

CT Initiatives to Facilitate & Inform a Network of Stand-alone Operations

- Provide Regulatory Guidance √
- Funding Piot Study √
- Hire State Shell Recycling Coordinator √
- Convene State Shell Recycling Committee
- Conduct Food Service Establishment Survey



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State Coordinator & Committee

Coordinator acts as liaison between state and local officials

Implementing Shell Recycling Programs and Provide Support to Existing Programs

Identify key players

Gather data and trends

Propose ideas for economic incentives

Create public outreach materials

Identify opportunities for the public to learn about food waste and environmental sustainability

Food Service Establishment Survey

- Gauge current participation, interest, motivations and hurdles to shell recycling.
- Target audience - the food service sector: restaurants, seafood retailers, and shellfish producers involved in direct marketing to consumers.

Regulatory Guidance

REGULATORY GUIDANCE AND BEST PRACTICES FOR SHELL RECYCLING OPERATIONS IN CONNECTICUT

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Regulatory Guidance

Minimum Components of a shell recycling proposal:

- Identify shell source
- Describe how shells will be reused
- Identify end user, if not the applicant
- Develop schedule and waste management SOP
- Identify transportation to be used, and develop SOP
- Identify shell storage location and develop maintenance SOP
- Identify location for sanitation of equipment and develop SOP that includes a schedule
- Prepare agreements with any partners and subcontractors

Regulatory Policy

- Shell Source: Shells must be from shellfish harvested within the United States
- Cured Shell Planting: No shell may be placed back into the waters of Long Island Sound without written authorization from the CT DOAG BA
- End Use: Applicant or unidentified end user

Next Steps

- Further explore the 5 models: some are up and running, and others are in development
- Conducting Food Establishment Survey
- Convening Shell Recycling Committee
- Modifying the Guidance as needed

Get Involved!

Interested in starting your own recycling program?
Contact Mike Gilman:
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Want to join the Shell Recycling Committee, or want more information on shell recycling?
Contact Mike Gilman:
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For more information on Regulatory Guidance contact:
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If you would like to exchange ideas on the CORR non-profit model contact Tim Macklin:
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Tim Macklin

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