

Proposed Plan Informational Meeting

Centredale Manor
Restoration Project
Superfund Site



Agenda

- Welcome /Meeting Purpose
- What is Superfund?
- Why Take Action?
 - Past Uses & Resulting Contamination
 - Exposure Pathways & Potential Risks
- EPA's Preferred Cleanup Alternative
- Why a Confined Disposal Facility?
- Opportunities for Commenting
- Questions & Answers



WHAT IS SUPERFUND?

The Superfund Process: from Discovery to Cleanup

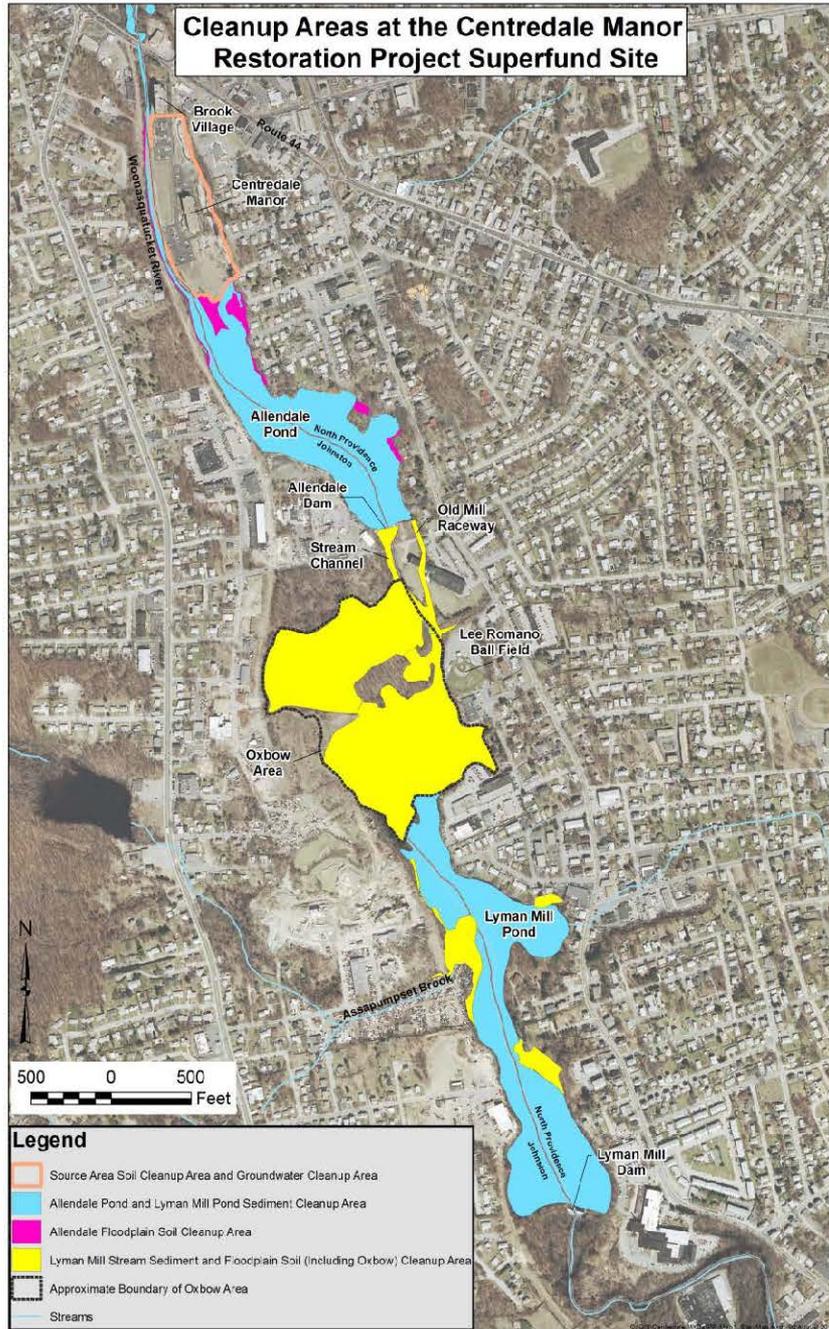




Woonasquatucket River

WHY TAKE ACTION?

Cleanup Areas at the Centredale Manor Restoration Project Superfund Site



Industrial Legacy

- Past Uses
 - Chemical Manufacturing
 - Drum Recycling
- Resulting Contamination
 - Dioxin
 - PCBs
 - Other

Potential Exposure & Risks

Risk from These Exposure Pathways:

- Eating contaminated fish
- Having direct skin contact with or accidentally ingesting contaminated sediment and/or floodplain soil

Cleanup Objectives

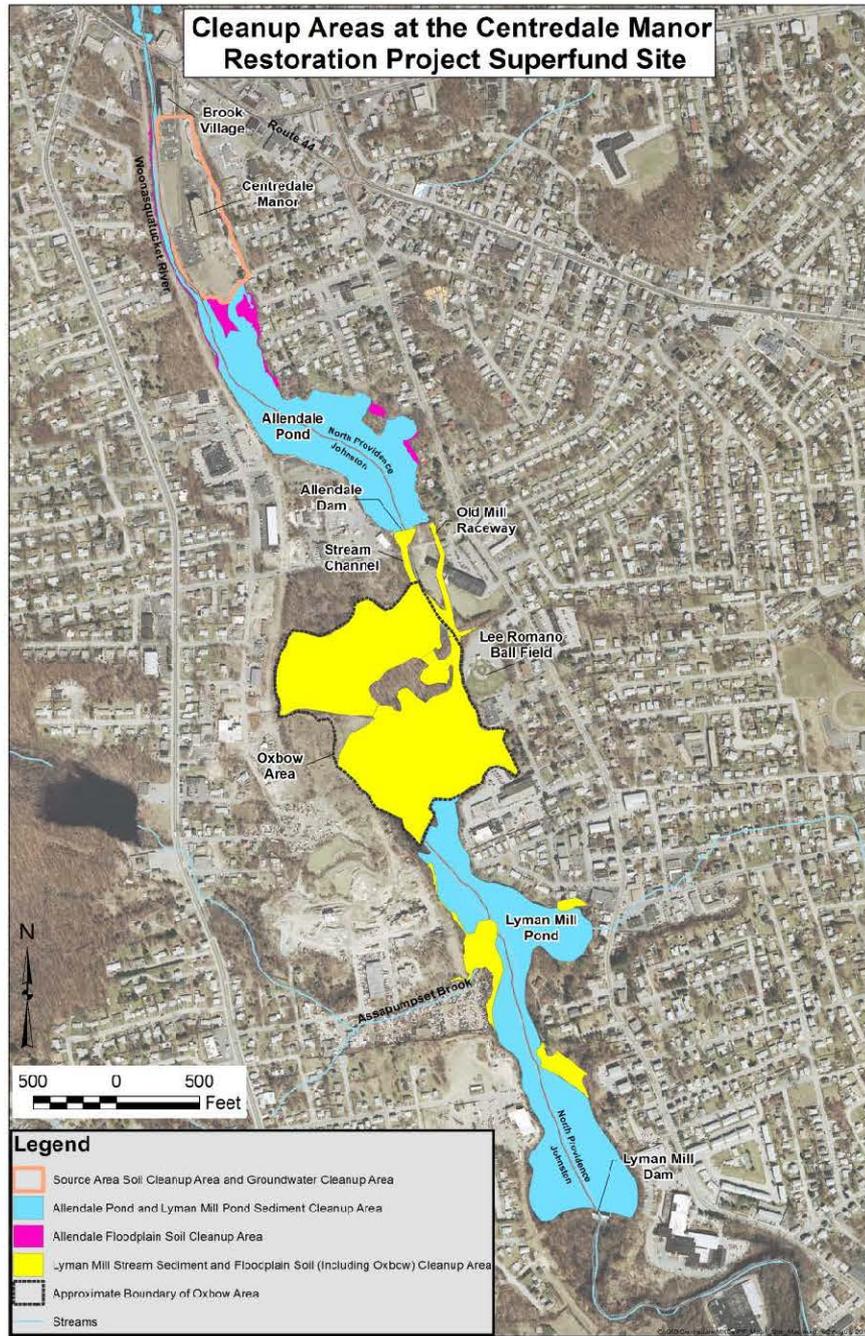
What the cleanup is expected to accomplish:

- 1. Eliminate unacceptable risks to human health and environment;**
- 2. Comply with environmental regulations;**
- 3. Minimize short-term impacts and optimize long-term benefits for wildlife; and**
- 4. Minimize potential downstream movement of contaminated sediment or floodplain soil.**



EPA'S PREFERRED CLEANUP ALTERNATIVE

Cleanup Areas at the Centredale Manor Restoration Project Superfund Site

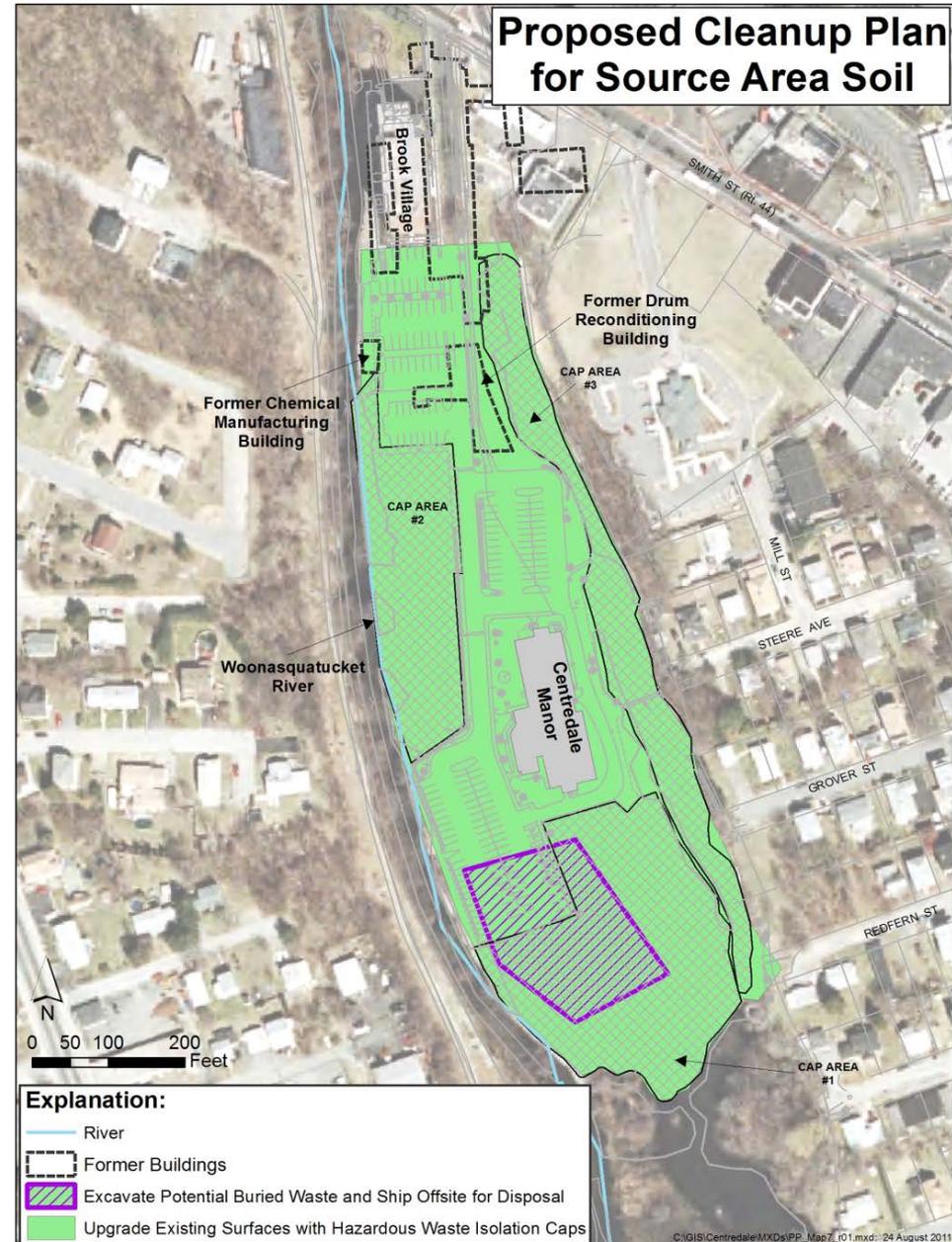


Proposal Overview

- 184,200 cubic yards removed from Source Area, river bottom and floodplain
- \$101 Million
- Most highly contaminated material taken off-site
- On-site Confined Disposal Facility
- Permanent caps in the Source Area
- Up to 5 years before construction starts
- Long-term maintenance and monitoring

Source Area Soil

- Targeted Excavation
- Off-site Disposal and/or Treatment
- Install New Caps to Cover Hazardous Waste



Sediment: Allendale Pond & Lyman Mill Pond

- Excavate 155,800 cubic yards (97,700 cubic yards dewatered volume)
- Contain On-site in an Upland Confined Disposal Facility
- Most highly contaminated sediment send off-site for treatment/disposal

Allendale Floodplain Soil

- Excavate about 2,400 cubic yards
- Contain On-site in an Upland Confined Disposal Facility

Lyman Mill Stream Sediment & Floodplain Soil (inc. Oxbow)

- Targeted Excavation of about 20,500 cubic yards
- Contain On-site in an Upland Confined Disposal Facility
- Enhanced Natural Recovery
- Send off-site for treatment/disposal most highly contaminated soil & sediment

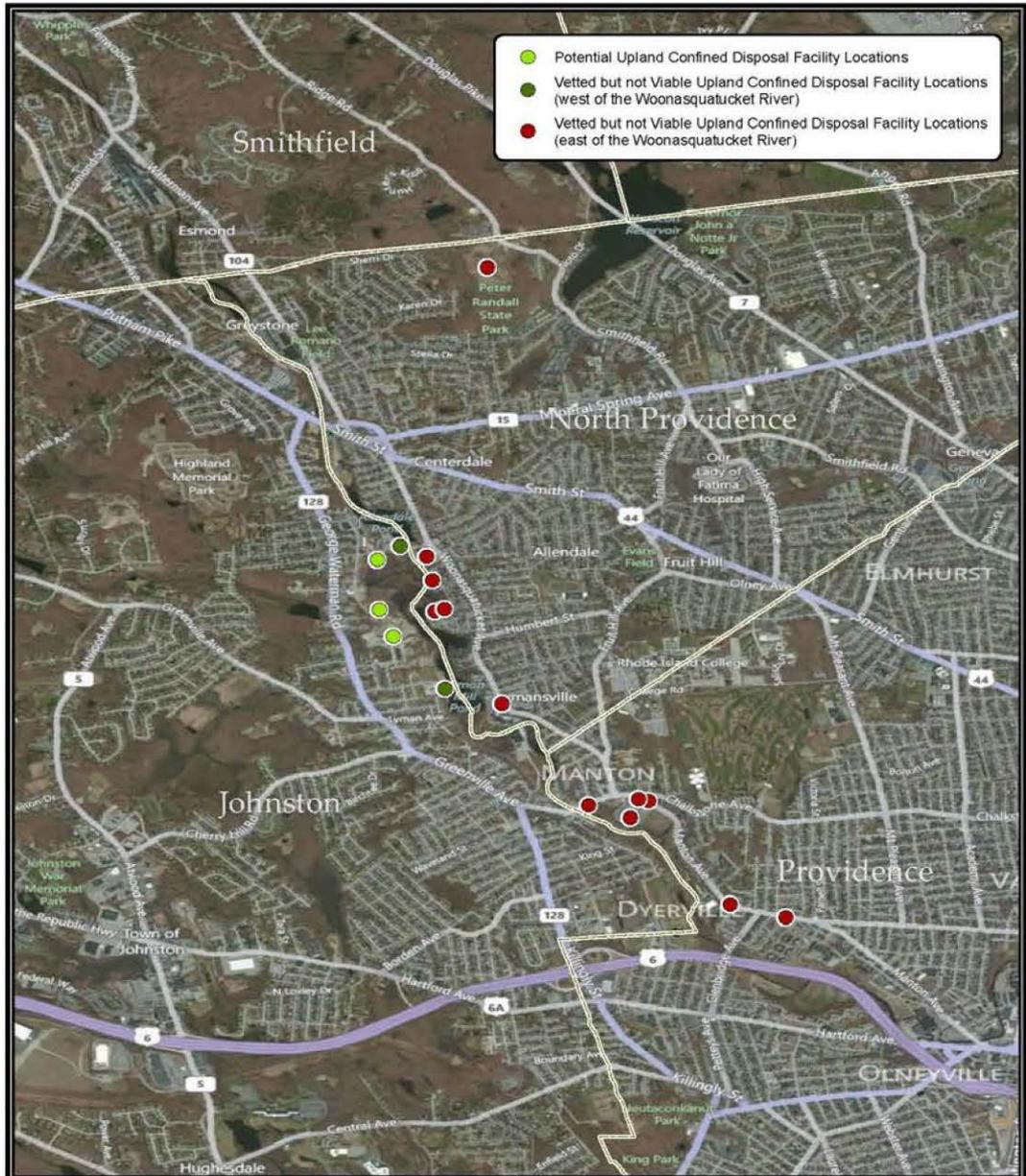


Preferred Disposal Option

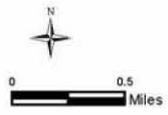
WHY A CONFINED DISPOSAL FACILITY?

Disposal Options

- Options Ruled Out
 - Confined Aquatic Disposal Cells: On-site & Off-site
 - Island
- Other Possible Options
 - Nearshore Confined Disposal Facility
 - Incinerator On-site
 - Off-site Disposal/Treatment
- Preferred Option
 - Upland Confined Disposal Facility



- Potential Upland Confined Disposal Facility Locations
- Vetted but not Viable Upland Confined Disposal Facility Locations (west of the Woonasquatucket River)
- Vetted but not Viable Upland Confined Disposal Facility Locations (east of the Woonasquatucket River)



**Upland Confined Disposal Facility Survey
Centredale Manor Restoration Project Superfund Site**

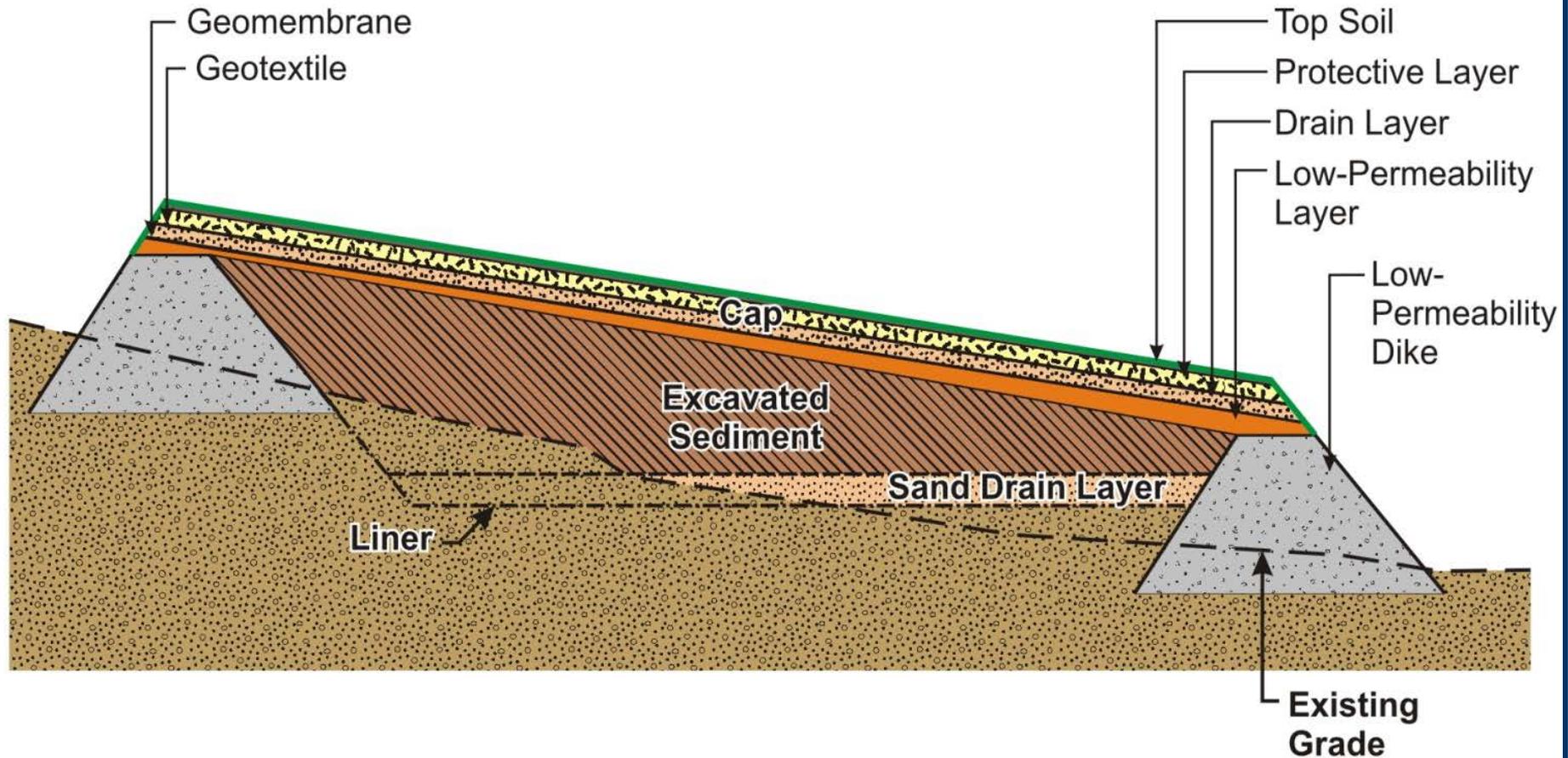


Map created by EPA Region 1 GIS Center | Map Tracker ID 8110 | November 1, 2011 | Data Sources: Aerial Basemap - Bing Maps; Town Boundaries - NAVTEQ, 2008

Upland CDF

- Dioxin & PCBs absorb to soil/sediment. Do not evaporate or dissolve. Good candidates for permanent storage.
- Highest levels will not be in CDF – instead off-site treatment & disposal
- Gets contamination out of river/floodplain
- Provides opportunity for beneficial reuse
- Meets Regulatory Criteria
- Highly protective at lower cost than other options

What does it look like cut in half?



Cross Section: Upland Confined Disposal Facility

Superfund CDF Example

Camilla Wood Preserving Company Superfund Site

- Contaminants included dioxins, creosote, pentachlorophenol, and polyaromatic hydrocarbons.



- Community park with soccer fields and small RV park opened in September 2007.
- County's Recreation Dept. operates park and plans to expand sports complex following future cleanup.

Superfund CDF Example

Whitmoyer Laboratories Superfund Site

In 2005 turned into park with:

- 3 soccer fields;
- baseball field;
- playground;
- picnic area; and
- walking/jogging trails linked to local and regional natural resources.



- Cleanup: large volumes of sludge, contaminated soil and other materials removed; on-site capping of moderately or lightly contaminated soil; and groundwater treatment.



Have an opinion?

WAYS TO COMMENT

Submit Your Comments

At a Hearing

December 7, 2011

- 2 pm Centredale Manor

Or:

- 7 pm North Providence Town Hall, second floor, Council Chambers

In writing by Jan. 12, 2012

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Warning • Aviso



EPA (800) 372-7341

In the Meantime...

DON'T

- Don't Eat Fish, Eels, Turtles, other Wildlife or Plants;
- Don't Swim or Wade;
- Don't Dig into River Banks.

Use the River Wisely

DO:

- Walk, run, or bike along the river;
- Paddle a canoe or kayak on the river;
- Wash thoroughly after any contact with the river water or sediment.





What are your questions?

QUESTIONS & ANSWERS