

4

A HEALTHY ENVIRONMENT

Overview

This booklet has been prepared for Westbrook residents and other persons interested in the formulation of the 2021 Plan of Conservation and Development (POCD) for Westbrook, Connecticut. This booklet is intended to provide an overview of strategies from the 2011 POCD related to the theme of “A Healthy Environment” with some suggested updates for consideration.

“[Nothing] compares in importance with ... the task of leaving this land even a better land for our descendants.”

Theodore Roosevelt
American President

The Natural Environment



The Coastal Environment



Sustainability & Resiliency



Sustainability & Resiliency



In the following pages, **black text** generally means the concept was included in the 2011 POCD. **Red text** is used to identify 2011 POCD strategies with “action verbs”. **Blue text** is used to present current information which may be relevant. **Highlighted text** is to draw your attention to a potentially important issue.



THE NATURAL ENVIRONMENT

Protect natural resources ...

2020 Information

Throughout this booklet (and other booklets), are these strategies, policies, and action steps still appropriate for Westbrook for the next 10-20 years?

What should be added?

What should be deleted?

Can any policies (passive verbs) be converted to action steps?

Maintain / Enhance “Green Infrastructure”

The 2011 POCD referred to Westbrook’s natural features and open space collectively as the community’s “green infrastructure”– an interconnected network of resources which supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to environmental health and quality of life.

Water-Related Resources

- Watercourses / waterbodies
- Long Island Sound
- Wetlands (tidal and inland wetlands)
- Flood zones (100-year and 500-year)
- Aquifers / groundwater recharge areas

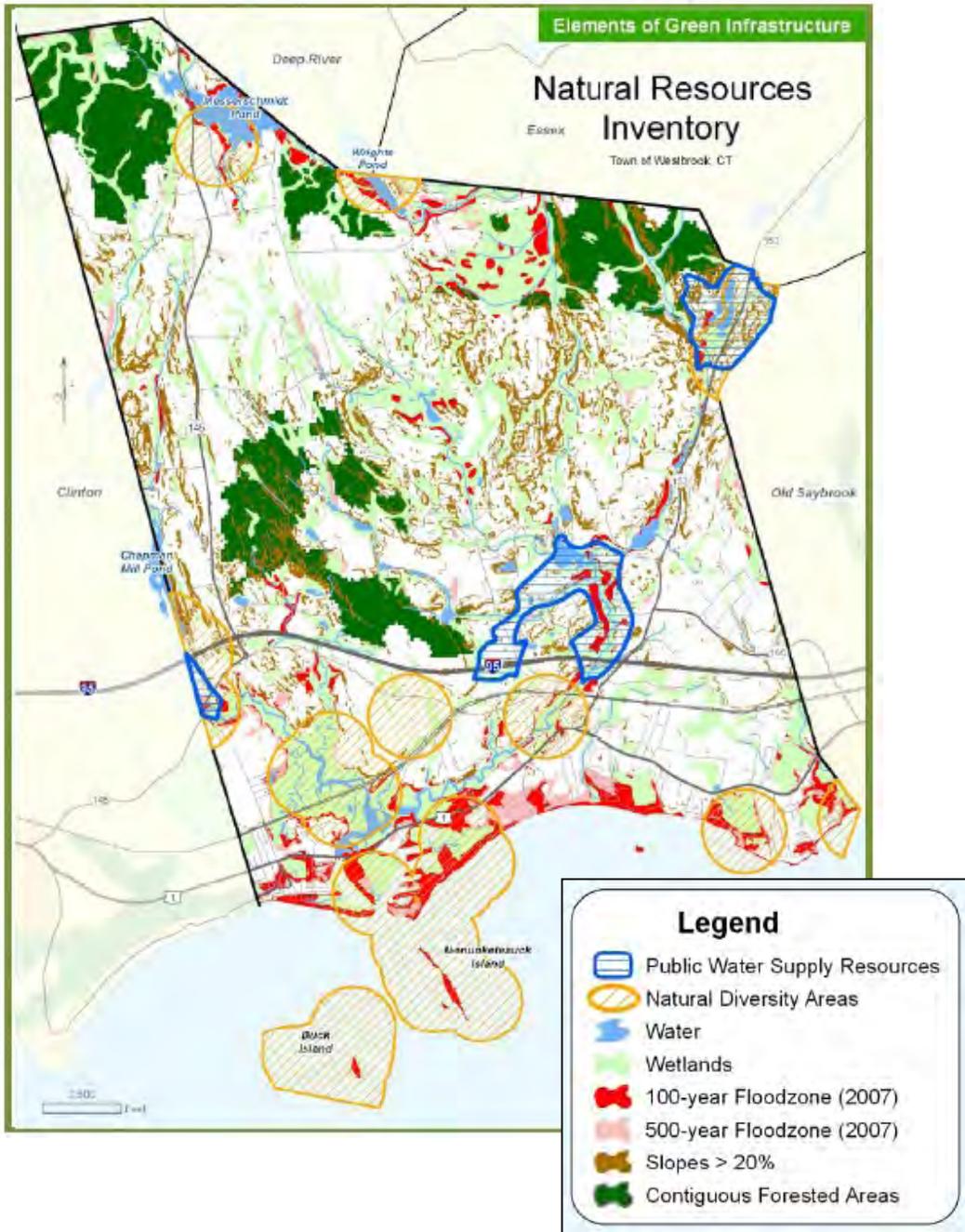
Land And Other Resources

- Steep slopes (>20 percent grade)
- Unique or special habitat areas
- Contiguous forest areas (>250 acres)
- [Open space areas]
- [Undeveloped areas]

The 2011 POCD recommended Westbrook strive to maintain the integrity of its “green infrastructure” for the benefit of current residents and future generations. It also recommended this “green infrastructure” approach be integrated into land use decision-making and serve as a guide for land use regulation updates, development reviews, and open space acquisition.



Maintain And Enhance Green Infrastructure	Leader / Partners
1. Maintain the integrity of “green infrastructure”	
2. Create a natural resource inventory	□
3. Integrate the “green infrastructure” approach in land use planning and decision-making	
4. Work with local, regional, and state partners to enhance “green infrastructure”	



Information Resources

- Wetland Regulations
- Aquifer Protection Regulations

Westbrook has a septic management ordinance requiring pump-out / inspection every 5 years by contractor (#18-36)

The 2021 POCD should recommend that the aquifer protection area north of I-95 be finalized (still level B).

The 2011 maps for surface water resources and groundwater resources may be included in the 2021 POCD at a smaller scale.

Since inland and coastal water quality are related, the 2021 POCD should combine the discussion.

Protect Water Resources

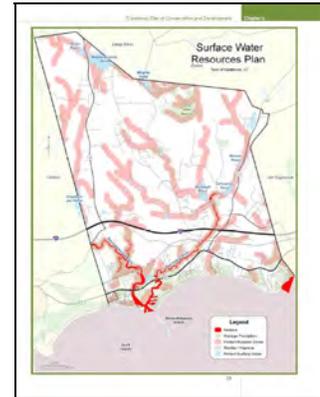
The 2011 POCD recommended protecting *inland* water resources and water quality as follows (NB – issues related to *coastal* water quality are on page 14 of this booklet):

1. Protecting watersheds on a regional basis.
2. Addressing pollution that comes from dispersed sources.
3. Continuing to protect the *quality* of and the *quantity* of groundwater.
4. Continuing to protect surface water quality by preserving buffers to waterbodies and restoring water quality in areas with known issues.
5. Continuing to implement “low impact development” (LID) approaches where rainfall is infiltrated into the ground, vegetation is used to clean runoff of pollutants, and runoff is slowed.
6. Monitoring and improving stormwater management systems including inspections, maintenance, and public education.

Groundwater Resources



Surface Water Resources



Protect Water Resources	Leader / Partners
1. Coordinate watershed efforts with regional partners	
2. Continue to protect groundwater resources	
3. Maintain groundwater protection regulations	
4. Monitor the quality and quantity of groundwater in areas served by private wells	
5. Continue to protect surface water resources	
6. Continue to address water quality issues resulting from the stormwater system	
7. Require the use of vegetated buffers (with performance standards) to protect water resources;	
8. Consider expanding vegetated buffer width	<input type="checkbox"/>
9. Ensure that existing buffers are not reduced	
10. Continue to monitor and improve stormwater management systems	
11. Adopt additional LID techniques (a performance -based approach)	<input checked="" type="checkbox"/>
12. Limit impervious surfaces	

Protect and Restore Habitat

The 2011 POCD indicated that plants and animals are important to the overall health of Westbrook’s environment (NB – this section addresses inland habitat with strategies related to [coastal](#) habitat on page 14 of this booklet). The 2011 POCD recommended that [inland](#) habitat areas be protected including:

- limiting development near important habitat areas, and
- minimizing the clearing and fragmentation of forests.

The 2011 POCD also recommended that the Town:

- encourage the restoration of habitat on previously developed sites, particularly when redevelopment is proposed,
- prohibit the use of invasive plant species,
- assess the impact of invasive plant species and create a plan of action, if needed, to eradicate or control them, and
- encourage the use of native plants.

However, the 2011 POCD also noted that detailed biodiversity data is not generally available for Westbrook and that the Town should continue to work with other government agencies and other natural resource organizations to collect more detailed data and develop area-specific strategies to protect species and habitat areas.

2020 Information

The 2021 POCD should highlight the habitat protection areas on Duck Island, on Salt Island, and in the McKinney Preserve.

The 2021 POCD should encourage restoration of habitat in degraded areas such as salt marshes.

Since inland and coastal habitat are related, the 2021 POCD should combine the discussion.

Protect and Restore Habitat	
1.	Work with partners to collect more detailed data on species and habitat
2.	Limit new development near important habitat areas
3.	Minimize the clearing of forest habitat when sites are developed
4.	Limit forest fragmentation in key forested areas
5.	Encourage the use of native plant species
6.	Prohibit the introduction of invasive plant species
7.	Support habitat restoration projects on previously developed sites

Information Resources

- RiverCOG Land Conservation Brochure
- Menunketesuck Cockaponset Regional Greenway Brochure

The 2021 POCD should define the term “open space.”

Westbrook has added to its open space inventory in the past 10 years.

The Zoning Regulations require conservation subdivisions in order to preserve about 50% of the land in residential subdivisions as open space.

For a conventional residential subdivision, the Subdivision Regulations require that 10 percent of the land be set aside as open space or that a fee be paid in lieu of providing land.

The 2021 POCD should review the exceptions in the Subdivision Regulations to conservation subdivisions.

Westbrook has had an Open Space Preservation Fund since 1999.

A member of the Plan Update Committee wondered if Westbrook needed more “parks” in addition to passive open space.

The 2021 POCD should be more specific regarding the PA-490 “local option” program.

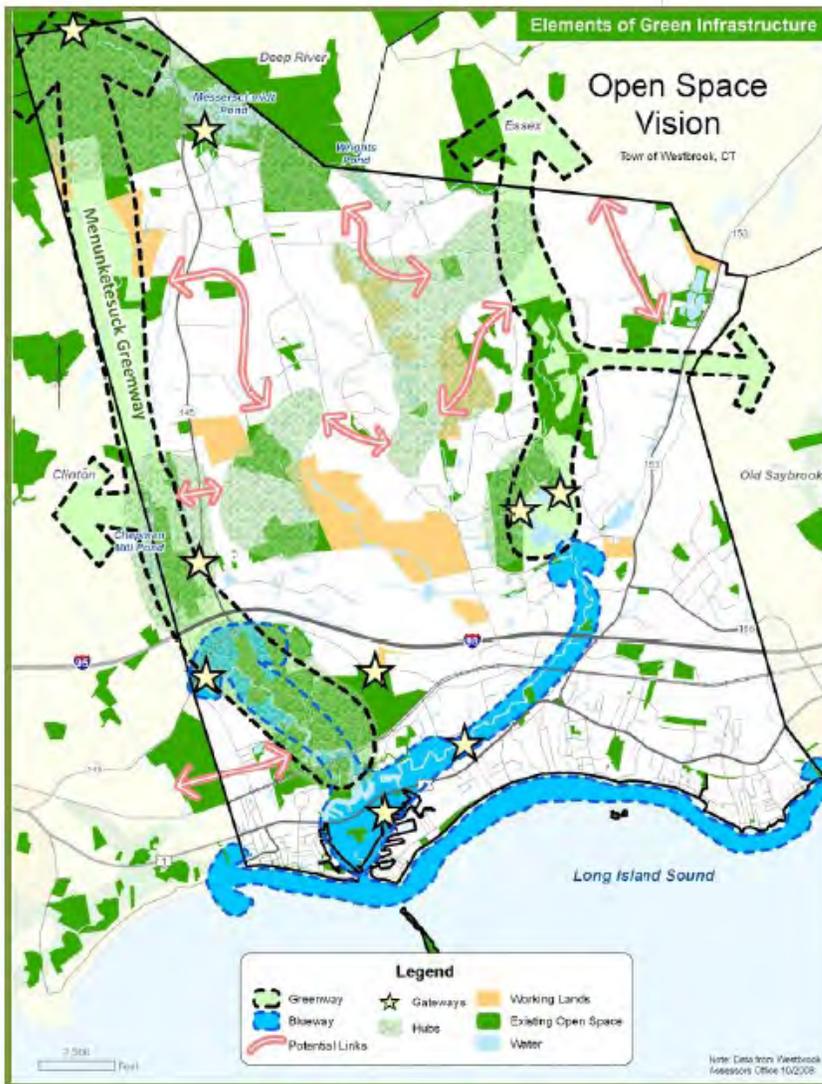
Continue to Preserve Open Space

During preparation of the 2011 POCD, Westbrook residents identified open space preservation as a high-priority issue. To help preserve open space, the 2011 POCD recommended use of the following tools:

1. Continue to require open space as part of new residential subdivisions:
 - Continue to require “conservation subdivisions” where at least half of the land is set aside as open space.
 - Coordinate open space with the “green infrastructure” concept.
 - Seek to create an overall system of greenways / trails.
 - Use the “fee-in-lieu-of-open-space” provision to get money when accepting land does not meet local objectives.
2. In already developed areas, consider allowing less lot area and/or frontage to allow land to be dedicated as open space.
3. Seek funding for open space acquisition as part of the annual Town budget, a bond issue, grants, donations, and other means.
4. Continue to partner with other open space organizations such as the Westbrook Land Conservation Trust, The Nature Conservancy, the Trust for Public Land, the State of Connecticut, and similar organizations.

The POCD also recommended that Westbrook evaluate the use of the PA-490 “local option” program (where private property owners receive a tax reduction for maintaining their property in an undeveloped state). To offer this program, it must be recommended in the POCD and approved by Town Meeting. The criteria for which property would be eligible would have to be determined.

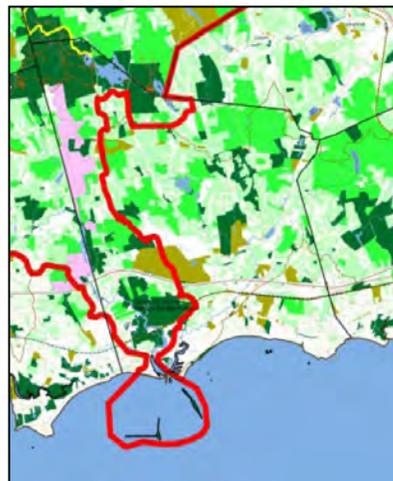
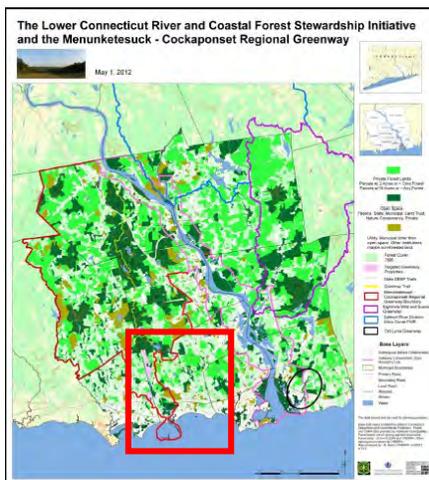
Continue to Preserve Open Space	Leader / Partners
1. Continue requiring open space at the time of development	
2. Coordinate land dedication with the “green infrastructure” concept	
3. Consider using the “fee in lieu of open space” tool in the Subdivision Regulations	
4. [Review] the criteria in the land use regulations for evaluating open space	<input type="checkbox"/>
5. Consider allowing zoning incentives to create additional open space	
6. Allocate funding to the Open Space Fund	
7. Continue to build partnerships with other organizations (land trust, state)	
8. Evaluate the use of the PA-490 open space assessment program	<input type="checkbox"/>



2020 Information

As part of the blueway concept, the Kirtland Landing Boat Launch on the Menunketesuck River received nearly \$170,000 in Federal funds for upgrades and improvements (boat launches and parking areas).

Westbrook’s Capital Budget programs \$125K for Kirtland Landing in the 2020-21 fiscal year.



M-C Greenway

The southern tip of the Menunketesuck-Cockaponset Regional Greenway, which has been recognized as a greenway of State significance, is located in Westbrook.

Open Space Vision

Greenways (with trails) are key **land-based elements** of the open space vision since they link open spaces and other places for walkers, cyclists, and equestrians. Greenways are also important components of the “green infrastructure” concept.

Blueways are **water-based routes** for canoeists and kayakers. The 2011 POCD felt it might be relatively simple to create blueways in the rivers by installing signs and creating maps (with launch points and points of interest).

Westbrook has been active in acquiring open space and in establishing and extending greenways and blueways.

2020 Information

The 2021 POCD should consider eliminating the following terminology in order to simplify discussion of the open space vision:

- “hubs”
- “links”
- “gateways”

The 2021 POCD might separate the concepts of “greenways” and “blueways” so that the special elements of each can be highlighted.

Plan for [an] Open Space System

A map in the 2011 POCD outlined Westbrook’s vision for open space and highlighted opportunities for enhancing an open space system in order to:

- guide future open space acquisitions,
- aid in the creation of “greenways” and “blueways”, and
- set priorities for the management and enhancement of open space.

The specific components of the open space system include:

Areas	<ul style="list-style-type: none"> • Existing Open Spaces - Lands currently preserved as open space • Working Lands - Land Used for agriculture (e.g., greenhouses, equestrian facilities, forestry) • Hubs - Large areas of existing and desired open space, large forested tracts or working lands in Westbrook (e.g., Cockaponset State Forest)
Lines	<ul style="list-style-type: none"> • Greenways - Desired corridors for pedestrian, bicycle and equestrian linkages between open spaces and other destinations • Blueways - Desired water “trails” that have launch points and points of interest • Potential Links - A smaller greenway that could connect hubs
Points	<ul style="list-style-type: none"> • Gateways - The main entrance to a hub or a link

Plan For A Comprehensive Open Space System	Leader / Partners
1. Continue to preserve land that helps achieve open space, recreation, and green infrastructure goals	
2. Develop an Open Space Plan based on the Open Space Vision. □	

Link Open Spaces With Greenways And Trails	Leader / Partners
1. Create additional greenways	
2. Design greenways for use by multiple users as feasible (pedestrians / bicyclists / equestrians), including consideration of ADA-accessibility	
3. Publicly recognize greenways	
4. Consider creating blueways	

Manage Open Space & Easements

The 2011 POCD recommended that Westbrook manage open space holdings and conservation easements as follows:

1. Create management plans for Town-owned open space to:
 - identify parameters for how land will (and will not) be used, and
 - how properties will be managed and by whom.
2. Maintain and promote trails (including parking) and developing promotional materials (such as signs and maps) to raise awareness about these facilities.
3. Use the GIS mapping system to coordinate and manage open space lands owned by the federal government, state government, the Town, and land trusts.
4. Find ways to better monitor (and mark) conservation easements and, if necessary, enforce the conservation restrictions.

OS Management

Most open space areas in Westbrook are managed (actively or passively) by their owners including:

- Westbrook Land Conservation Trust,
- Forest Commission,
- Conservation Commission,
- State Department of Energy and Environmental Protection
- National Park Service

The 2021 POCD should recommend that we continue to create management plans as opportunities arise or as needs dictate.

Continue to Preserve Open Space	Leader / Partners
1. Create management plans for Town-owned parcels □	
2. Maintain and promote existing open space and trails	
3. Provide amenities, such as parking, at open space gateways	
4. Perform a baseline inventory of new conservation easement areas □	
5. Continue to manage and update the open space database	
6. Add / update conservation easements to the GIS □	
7. Require boundary markers to delineate conservation easements; Perform inspections	



**RiverCOG / Land Trusts
Conservation Priorities Map**





THE COASTAL ENVIRONMENT

Continue to give special consideration to Long Island Sound and coastal resources ...

2020 Information

Should the 2021 POCD include a coastal vulnerability section?

The Zoning Regulations have a Coastal Area Management Overlay District

The Zoning Regulations have a Coastal Conservation District for offshore islands

NEW Set Up A Coastal Vulnerability Framework

Since adoption of the 2011 POCD, there has been growing realization that coastal communities need to figure out how they will address:

- The consequences of sea level rise, and
- The impacts of more frequent and more intense coastal storms.

In October 2017, the Connecticut Institute for Resilience and Climate Adaptation (CIRCA) released a recommendation that Connecticut communities plan for sea level rise of 20 inches (0.5 meters) between then and 2050. This was not a prediction, but it was a scenario of a possible situation that communities should be prepared to address if it were to occur. Planning for higher water levels takes on greater significance when the potential for more frequent and more intense coastal storms resulting from warmer temperatures is also considered.

This is important for several reasons:

- Municipalities will need to figure out how they will adapt to higher water levels in terms of providing public goods and services in coastal areas and how they might need to respond to public emergencies,
- Neighborhood associations will need to evaluate what their roles might be given their unique circumstances, and
- Residents, businesses, and property owners will need to evaluate their own situations and decide how they wish to prepare or respond.

Westbrook does not really have a good inventory or assessment of potential coastal vulnerabilities and which potential responses may be best in certain locations or situations:

- **Protection** - protecting the land from the sea so that existing land uses can continue.
- **Accommodation** - continuing to use the land at risk but not attempting to prevent the land from being flooded.
- **Retreat** – abandoning the coastal zone (before or after an event) with no effort to protect the land from the sea.

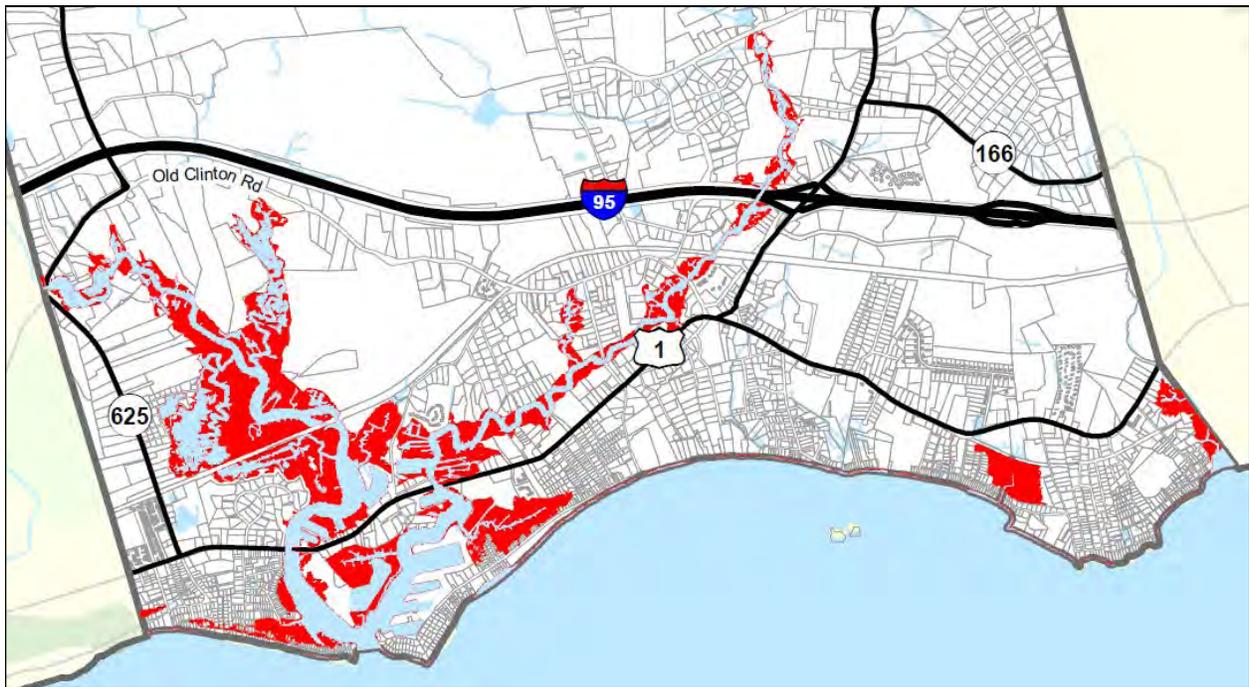
Westbrook is proposing to undertake “resiliency planning” with project funding expected to begin in the 2021-22 fiscal year.

Plan For

20”

Of Sea Level Rise By 2050

Scenario Of 24" Rise In Sea Level (Mean High Water)
(Does not include tidal fluctuations or storm surges)



However, having an inventory of possible issues is only the first step. Westbrook needs to understand the cost (and other) implications related to different responses and decide how it will be able to address them.

The scope of the issues associated with sea level rise and storm damage are so extensive and expensive that it will be difficult, if not impossible, for the Town of Westbrook or any other governmental organization to address them all.

While affected property owners (and neighborhood associations) will be key participants in addressing the consequences of sea level rise and coastal storms, they also need to have some indication how the Town will address these issues so they can plan accordingly.

Actions at all three levels will need to be coordinated to achieve the maximum result.

2020 Information

The areas associated with each of the 17 different beach associations should be mapped in the POCD since each association may be affected differently by coastal issues in the future?

It is important to note that land and buildings in coastal areas (residential and non-residential) make up a large part of Westbrook’s tax base and these impacts will need to be managed as well.

Possible Framework

Individual Buildings / Properties

Property owner will likely be responsible for protection and repair of individual buildings and properties. Flood insurance or disaster relief funds may be available.

It is unlikely the Town will be in a position to address issues associated with individual buildings.

Possible Approaches

- Elevate buildings
- Elevate / protect properties
- Relocate

Neighborhood Approaches

There may be “middle-ground” situations where a project may provide some neighborhood (but not town-wide) benefits and, in such situations, options may include:

- neighborhood associations undertaking such projects,
- the Town coordinating and administering an “assessment of benefits” approach,
- the Town facilitating establishment of a “special service district” for the benefit of the affected property owners,
- property owners (as a group) undertaking improvements privately.

Possible Approaches

- “Living shorelines”
- Seawalls / bulkheads / groins / breakwaters
- Beach nourishment / dune restoration
- Engineered banks / artificial reefs

Road And Utility Infrastructure

Infrastructure issues will likely need to be investigated on a location-by-location basis. A framework should be developed for:

- looking at action thresholds (number of properties affected, number of anticipated events, anticipated life of investment, cost-benefit, etc.) for different infrastructure items,
- estimating when (or if) that action threshold is likely to occur, and
- prioritizing improvements based on the action threshold.

In some situations, it simply may not make fiscal sense for all of the Town taxpayers (or for a utility provider) to undertake some infrastructure improvements in vulnerable areas.

Possible Approaches

- Protect water supply
- Protect power supply
- Keep communications
- Improve drainage
- Maintain sewage
- Raise access roads where practical

Retreat

Gradually retreat from vulnerable areas as circumstances dictate.

Possible Approaches

- Undertake phased abandonment
- Implement buyouts
- Stop providing public services
- Expand marsh capacity
- Facilitate marsh migration

Set Up A Coastal Vulnerability Framework	Leader / Partners
1. Establish a coastal vulnerability working group.	<input type="checkbox"/>
2. Establish a framework and/or program for addressing coastal vulnerability issues (possibly including cost-benefit analysis, life-cycle costing, and other considerations).	<input type="checkbox"/>
3. Assemble information in terms of “orders of magnitude” for the costs associated with different coastal vulnerability responses (based on sea level rise scenarios of 2, 4, and 6 feet).	<input type="checkbox"/>
4. Undertake a cost/benefit analysis to compare the costs of infrastructure improvements with the number of properties affected, the nature/extent of the risk, and the anticipated useful life of the improvement.	<input type="checkbox"/>
5. Prepare a conceptual capital improvement program to balance fiscal capacity with coastal issues / needs	<input type="checkbox"/>
6. Evaluate whether Westbrook should impose stricter rules on development in coastal floodplain areas (freeboard, building height, building design/typology, setbacks from tidal wetlands, water quality buffers, etc.).	<input type="checkbox"/>
7. Allow (or even encourage or require) homeowners to elevate their buildings within the parameters established by the National Flood Insurance Program and in ways which are consistent with state and federal policy and do not present an undue risk to public health and safety.	
8. Continue to participate in the National Flood Insurance Program so that flood insurance will be available to private property owners.	
9. Advocate for disaster relief funding in the event of a major storm.	
10. Work with regional, state, and federal agencies and other organizations to address issues related to coastal vulnerability (including ways to encourage property owners to retreat from vulnerable locations).	
11. Prepare detailed maps showing areas subject to potential inundation in the future.	<input type="checkbox"/>
12. Assemble and maintain a database of “repetitive loss” properties.	<input type="checkbox"/>
13. Continue to participate in updating and maintaining the RiverCOG Hazard Mitigation Plan in order to coordinate and guide regional efforts.	

2020 Information

Information Resources
<ul style="list-style-type: none"> • Coastal Resources Management Plan • RiverCOG Hazard Mitigation Plan

Some communities and councils of government have created (and are updating) coastal resilience plans and these could be key resources for consideration.

The Connecticut Institute for Resilience & Climate Adaptation (CIRCA) is also a resource for municipalities addressing issues related to sea level rise and coastal resilience.

The Office of Long Island Sound Programs at the Connecticut Department of Energy and Environmental Protection can also help.

The Nature Conservancy has also been quite active in evaluating sea level rise and storm vulnerability.

Seeking Balance

The 2011 POCD discussed finding an appropriate balance between natural processes and man-made modifications:

- Maintaining the jetties at the Town Beach (and improving other Town-owned erosion control structures along the shore from West Beach to Middle Beach) to protect publicly owned shorefront in the area where the heaviest damage has occurred from coastal storms.
- Continuing to seek ways to protect beach and dune areas from beach erosion, beach starvation, and man-made structures which accelerate erosion and/or reduce beach replenishment.
- Continuing to support engineered beach replenishment by coastal property owners provided care is taken to ensure that the natural dynamic relationship between sediment sources and depositional areas is respected.

Current / Prior Projects

The Capital Budget programs \$500K over the next 5 years for West Beach jetties.

In the early 1980s, the Army Corps of Engineers pumped in sand for beach nourishment (lasted about 10 years).

Protect Coastal Resources / Address Water Quality

The 2011 POCD recognized the importance of protecting coastal resources and focused on the following concepts:

1. **Water Quality** – Improving coastal water quality since polluted runoff can result in beach closures, fishing and shellfishing restrictions, low dissolved oxygen (hypoxia), and increased sedimentation of navigation channels and other shallow waters.
2. **Balancing Beach Protection With Natural Processes** – Continuing to seek ways to protect beach and dune areas from erosion / starvation while respecting natural processes.
3. **Habitat Protection** - Continuing to protect coastal habitat

Enhance Protection of Coastal Resources	Leader / Partners
<ol style="list-style-type: none"> 1. Maintain and restore flushing of tidal wetlands 2. Protect beach and dune areas 3. Maintain the jetties at the Town Beach and reinforce other Town-owned erosion control structures 4. Protect coastal habitat: <ol style="list-style-type: none"> a. Nesting and breeding habitat of shore birds b. Control pedestrian and pet access, ensure proper trash control and set temporary restrictions on access during breeding season 	

Address Coastal Water Quality Issues	Leader / Partners
<ol style="list-style-type: none"> 1. Continue to protect water quality from the impacts of development by performing case-by-case reviews as part of the coastal site plan review process 2. Continue requiring best management practices as part of coastal site plan review approvals and for Town infrastructure improvement projects <li style="background-color: #d9ead3;">3. Identify LID opportunities in the Coastal Management Area <input checked="" type="checkbox"/> 4. Reduce, or eliminate, direct stormwater discharges to coastal waters 5. Educate property owners about sound landscaping practices, stormwater management and invasive species avoidance, septic system maintenance and impervious surfaces 6. Support efforts to remove invasive species from tidal wetlands 7. Support “Clean Marina” efforts where marina operators undertake efforts to reduce pollution associated with the operation of recreational boating facilities 8. Work with public health officials to open shellfish beds (shellfishing banned in Westbrook due to public health concerns). 9. Work with beach associations to retrofit stormwater management systems on private roads 10. Retrofit the stormwater management systems for public roads along the coast 	

Support Water-Dependent Activities

Westbrook’s coastal area also includes uses and activities that are important to the community and that require direct access to, or location in, marine or tidal waters and cannot be located inland. These are called “water dependent uses” and this can include marinas, recreational and commercial fishing, boating facilities, waterfront docks, boat-building facilities, water-based recreational uses, navigation aids and channels, and general public access.

A “water dependent use” is different than a “water-related use” which may benefit from proximity to the water or may offer activities that take advantage of being near the water but is not dependent on direct access (Water’s Edge Inn and Resort, restaurants, marine sales/repair, beach shops, etc.).

Recommendations in the 2011 POCD included:

1. Supporting and promoting water-dependent uses.
2. Supporting water-related uses as.
3. Requiring waterfront development (other than single-family houses) or a change from a water-dependent use to a non-water-dependent use to include space for water-dependent uses (which may include public access, when appropriate).

The 2011 POCD noted that the success and sustainability of the marinas and the businesses connected with them depend on periodic maintenance dredging of the channels within the Patchogue and Menunketesuck Rivers (the U.S. Army Corps of Engineers is responsible for dredging the navigational channels within the Patchogue River).

Information Resources
<ul style="list-style-type: none"> • Coastal Resources Management Plan • Harbor Management Plan

Continue to Support Marinas and Other Water-Dependent and Related Activities	Leader / Partners
1. Support water-dependent uses	
2. Evaluate zoning and other restrictions in marina areas <input checked="" type="checkbox"/>	
3. Continue to support water-related uses	
4. Require that new waterfront development include public access, where appropriate	
5. Develop a public access strategy for areas where development (or redevelopment) is likely to occur in the future <input type="checkbox"/>	

Information Resources

- Coastal Resources Management Plan
- Harbor Management Plan

The 2021 POCD should discuss the three different types of access:

- Visual
- Physical
- Boating

The 2003 Coastal Resources Management Plan noted that Westbrook is relatively unique along the Connecticut shoreline in that it has long continuous sections of beach (and about 95% of Westbrook’s shoreline consists of sand/gravel/dune beaches.

Enhance Public Access

The 2011 POCD recommended that Westbrook seek to maintain and enhance public access to beaches and waterfront areas because:

- About 60 percent of the waterfront in Westbrook was privately owned,
- About 25 percent was owned by private beach associations, and
- Only about 15 percent was publicly owned.

Recommendations in the 2011 POCD included:

1. Updating the 1970s study identifying the locations of existing access points (public and semi-public) and add them to the public access inventory
2. Implementing a sign program to help residents easily find access points.
3. Enforcing public access.
4. Managing parking at public access areas to manage impacts affecting abutting property owners,
5. Maintaining and improving site-specific access points:
 - access point along Middle Beach.
 - access and parking at the Town Beach.
 - continued public use of privately-owned boat ramps.
 - Town Dock facilities (e.g., fishing, site access).
 - upgrades to the Kirtland Landing boat ramp due to its popularity.
 - “informal” public access points for fishing and crabbing (such as the Wesley Avenue bridge and Clark’s bridge) provided riverbanks are not damaged.
6. Establishing additional public access points:
 - a fishing area / car-top boat launch at the Mulvey Municipal Center.
 - a visual overlook of the Patchogue River marsh from the Town-owned American Legion property (“Chapman parcel”).
 - determining if there is a need for additional public boat launches.

Enhance Public Access	Leader / Partners
1. Identify and promote existing public access points	
2. Update the right-of-way inventory	□
3. Create a public access sign program	□
4. Provide additional public access points where feasible	
5. Keep public access inventories up to date.	
6. Enforce public access	

Map of Public Access Points



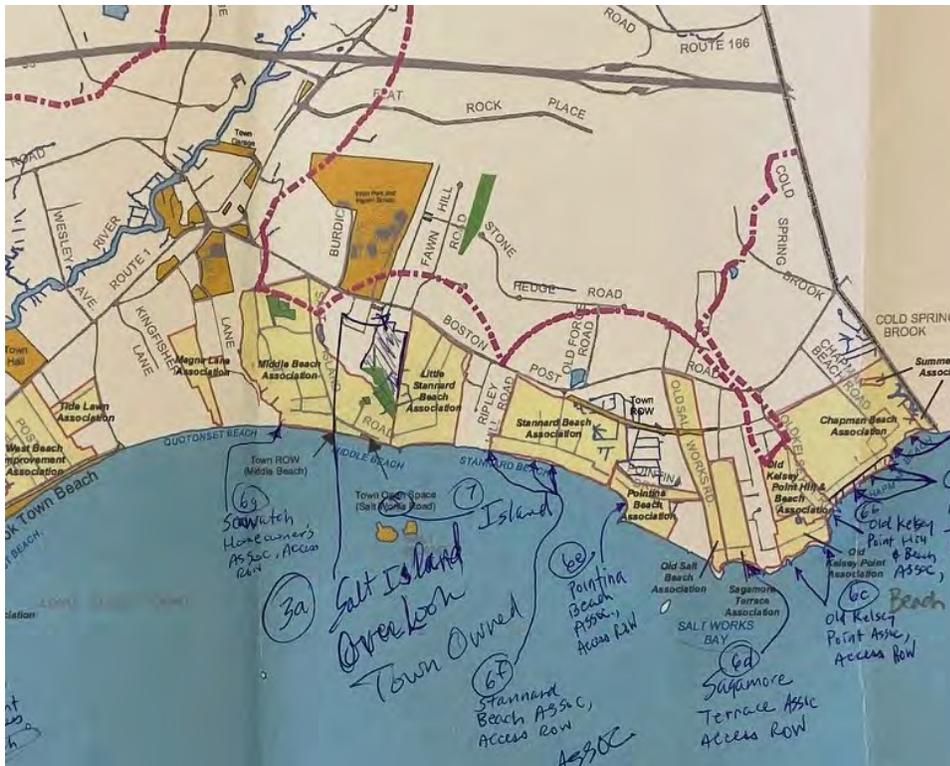
2020 Information

Since most public access points have no public parking, they are most relevant for neighborhood residents.

Because of this, should public access points be identified in the 2021 POCD?



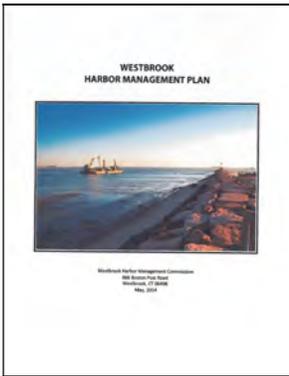
Westport, Connecticut
Coastal Resources Management Plan
LAND, OPEN SPACE &
ASSOCIATION AREAS
Figure



Information Resources

- Harbor Management Plan

The 2014 Harbor Management Plan should be referenced in the 2021 POCD.



Is the breakwater deteriorating to the point where it needs repair? Who is responsible for this?

Are navigation channels silting in to the point that dredging is needed? Who is responsible for this?

The Capital Improvement Plan shows \$25,000 annually for dredging over the next five fiscal years.

Improve ... Navigable Waterways

Navigable waterways are important to Westbrook and the 2011 POCD recommended:

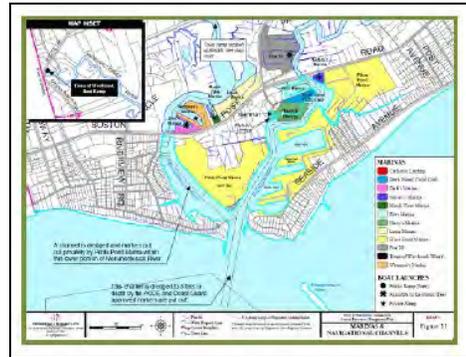
1. Developing and adopting a harbor management plan which would contain goals, objectives, policies, guidelines and recommendations for the balanced use of the harbor management area with regard to marine, commercial, recreational, and other purposes (such as the location and distribution of seasonal moorings / anchorages and for navigation channels).
2. Supporting dredging efforts in Westbrook Harbor including partnering with interested stakeholders in order to increase the potential of obtaining funding (from the U.S. Army Corp of Engineers or elsewhere).
3. Confirming and maintaining “harbor lines” north of Route 1 on the Menunketesuck and Patchogue Rivers in order to regulate dock construction and prevent dock encroachment into navigational channels.

Improve the Management of Navigable Waterways	Leader / Partners
1. Develop and adopt a Harbor Management Plan <input checked="" type="checkbox"/>	
2. Continue to support (periodic) dredging of the federal navigation channel	
3. Discourage uses that unreasonably congest navigation channels	
4. Continue to build partnerships with public and private stakeholders	
5. Explore alternate methods for regulating dock construction north of Route 1 on the Menunketesuck and Patchogue Rivers <input checked="" type="checkbox"/>	

Tidal / Inland Wetlands



Marina Locations



Finalize the Coastal Management Plan

Westbrook's coastal area (defined in State law and generally extends inland 1,000 feet from the shore) contains about 2,565 acres or about 24 percent of the town's land area.

One of the responsibilities which comes from being a coastal community is to implement the provisions in the Coastal Management Act (CGS Sections 22a-90 *et seq.*) including:

- acting in accordance with the goals and policies of the Coastal Management Act,
- coordinating with the State to find an appropriate balance for activities within the coastal area "without significantly disrupting either the natural environment or sound economic growth." (CCMA Section 22a-92(1))
- protecting coastal resources, and
- implementing other coastal area management policies within the coastal area.

By reference, the 2011 POCD "*incorporated*":

- the resource and use policies of the Coastal Management Act, and
- a Coastal Resources Management Plan (CRMP) prepared for Westbrook in 2005.

However, the 2011 POCD noted that the 2005 CRMP was never *formally* adopted and it recommended that Westbrook add an implementation chapter and adopt the CRMP

Information Resources

- [Coastal Resources Management Plan](#)

The 2005 Coastal Resources Management Plan should be referenced in the 2021 POCD, particularly for its inventory of resources.

Finalize and Adopt the Coastal Resource Management Plan	Leader / Partners
1. Finalize and adopt the Coastal Resources Management Plan <input checked="" type="checkbox"/>	



SUSTAINABILITY & RESILIENCY

Minimize impacts from new and existing development ...

2020 Information

Information Resources

- Hazard Mitigation Plan

Top-Ranked Hazards

- Flooding due to coastal storms
- Sea level rise
- Severe wind (hurricanes, tropical storms, nor'easters, etc.)
- Severe winter weather

Since the Hazard Mitigation Plan is updated on a regional basis every five years, the 2021 POCD should recommend that Westbrook continue to update and implement this plan.

For the purposes of the 2021 POCD:

- The term “sustainability” refers to the concept of an integrated planning approach designed to meet the needs of the present generation without compromising the ability of future generations to meet their own needs), and
- The term “resiliency” means a community’s ability to withstand, respond to, and readily recover from sudden change or adversity as well as the community’s ability to adapt to long-term change.

These topics are linked since, as some have observed, mankind’s inability to act sustainably has contributed to mankind’s need to adapt to climate change and other impactful events and trends.

Adopt / Implement Hazard Mitigation Plan

The 2011 POCD indicated that preparation of a Hazard Mitigation Plan would aid in the ability to understand potential threats and how to prevent and/or mitigate them. Such a plan:

- identifies areas at risk from natural hazards,
- identifies strategies to address these issues, and
- makes the Town eligible for certain federal funding programs.

Since adoption of the 2011 POCD, the Hazard Mitigation Plan has been updated (with RiverCOG) to reflect our current understanding of risks and mitigation strategies.

Improve the Management of Navigable Waterways	Leader / Partners
1. Develop and adopt the Hazard Mitigation Plan <input checked="" type="checkbox"/>	
2. Implement the Hazard Mitigation Plan	

Manage Flood Risks

The 2011 POCD recognized the need to manage risks (public safety, property damage, and even loss of life) associated with flooding and recommended:

1. Continuing to participate in and comply with Federal floodplain programs (~~including the voluntary Community Rating System system~~) so that property owners can obtain flood insurance as cost effectively as possible.
2. Continuing to minimize non-water dependent development (especially housing) in flood zones including careful consideration of “variance” requests which do not meet the strict, statutorily defined concept of hardship.
3. Considering requiring that new residential construction on coastal properties be built at least one foot above projected flood levels (called freeboard) as is currently required for commercial properties.
4. Preparing coastal areas for greater flooding risks / sea level rise and considering the potential long term need for :
 - adaptation (modifying facilities to accommodate change), and/or
 - gradual retreat from vulnerable low-lying waterfront areas.
5. Evaluating properties (especially municipal facilities) potentially impacted by storm-related surges and similar hazards.
6. Continuing to educate the public on the risks associated with natural hazards and what they can do to minimize these risks.

Information Resources

- 2008 inland flood study (being updated)
- 2013 coastal flood study
- Hazard Mitigation Plan

Since the approaches (and impacts) are different, the 2021 POCD should distinguish between inland flood risk versus coastal flood risk.

The 2021 POCD should recommend continuing to educate the public on natural hazards and vulnerable areas (move to Hazard Mitigation Plan?).

Westbrook is no longer part of the Community Rating System

The Zoning Regulations have a Flood Plain Overlay District

In 2016, the State Building Code was amended to require more “freeboard” the height above flood level

Coastal areas are vulnerable to wave action in storm events and a LiMWA (Limit of Moderate Wave Action) area has been identified so that communities can adopt the more stringent building construction standards applicable for V Zones in areas that will be affected by breaking waves with a 1.5 foot wave height or greater within the coastal A zone.

Manage Flood Risks	Leader / Partners
1. Continue to ensure that new development or redevelopment in floodplains has minimal flood-related risks	
2. Consider extending the freeboard requirement to residential properties	
3. Maintain compliance with the National Flood Insurance Program	
4. Continue to participate in the Community Rating System program and aim to improve Westbrook’s rating	
5. Improve record-keeping, provide training, and use GIS to track activity in vulnerable areas	
6. Continue to update flood studies	
7. Adopt measures to help prepare the coastal areas for sea level rise	<input type="checkbox"/>
8. Evaluate properties affected by other hazards (e.g., hurricanes)	
9. Educate the public on natural hazards and vulnerable areas (e.g., floodplains, hurricanes)	<input checked="" type="checkbox"/>
10. Partner with private interests to coordinate efforts regarding seal level rise	

Since there are no “brownfield” sites in Westbrook (although there are some sites with environmental contamination), the 2021 POCD should move this discussion to a sidebar in a relevant part of the POCD.

Encourage Restoration of Brownfields

The term “brownfield” refers to properties with environmental contamination. Financing, expansion, redevelopment, or reuse may be complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants.

Communities may support the clean-up and re-use of brownfield sites (and sometimes participate in the cleaning up and reinvesting in these properties) in order to:

- Promote economic development,
- protect the environment,
- reduce blight, and
- take development pressures off green spaces and working lands.

The 2011 POCD recommended that Westbrook:

1. Identify contaminated sites and determine which might be priorities for redevelopment.
2. Work with affected landowners to understand their site restoration needs, explore alternative remediation methods, and determine if additional municipal assistance is needed.
3. Educate the public and landowners on the availability of “brownfield” programs.
4. Consider seeking funding to help move these restoration projects along and facilitate the clean-up and re-use of brownfields.

Encourage Restoration of Brownfields	Leader / Partners
1. Educate the public and landowners on brownfield programs and funding	
2. Identify contaminated sites and work with landowners	□
3. Consider seeking funding sources for restoration activities	

Implement Sustainability Practices

With regard to sustainability practices, the 2011 POCD recommended that:

1. Westbrook adopt and implement the Strategic Energy Management Plan crafted for the community.
2. Consider using “green building” criteria for new buildings and major renovations of public and private buildings to result in buildings that are more environmentally responsible.
3. Consider implementing “green neighborhood” criteria to integrate the principles of smart growth and green buildings into new development.
4. Incorporate “green practices” at municipal facilities such as using natural and renewable products in building construction, minimizing use of chemical lawn care, and improving indoor air quality.
5. Work with other communities and organizations to promote energy conservation, green practices, and waste reduction.
6. Develop a plan to reduce waste, increase recycling efforts, prevent litter, and incentivize the purchase of products made from recycled material.
7. Promote water conservation and reuse.
8. Undertake efforts to reduce local sources of air pollution and mitigate air pollution through planting more trees.

Implement Sustainability Practices	Leader / Partners
<ol style="list-style-type: none"> 1. Adopt and implement the Strategic Energy Management Plan <input type="checkbox"/> 2. Consider using “green building” criteria for new buildings (e.g., LEED) 3. Consider “green neighborhood” criteria 4. Incorporate “green practices” at municipal facilities 5. Work with other communities and organizations to promote energy conservation and “green practices” 6. Expand recycling programs 7. Promote waste reduction 8. Provide education about recycling and waste reduction 9. Promote water conservation and reuse 10. Reduce emissions from local sources 11. Mitigate air pollution with tree planting 	
<ol style="list-style-type: none"> 12. Evaluate landscaping standards in the land use regulations to encourage tree planting within new site development <input checked="" type="checkbox"/> 	

2020 Information

Information Resources

- Hazard Mitigation Plan
- Strategic Energy Management Plan

Sustainability / resilience should be a separate theme of the 2021 POCD.

An organization called SustainableCT has established a program for communities to be recognized as sustainable.

The 2021 POCD should recommend that Westbrook investigate participating in the SustainableCT program.

Solar and wind are allowed as accessory structures in residential zones but are not specifically listed in business or industrial zones.

