# **Briefing Booklet #4A**

January 10, 2018

# **PROTECT NATURAL RESOURCES**



## Overview

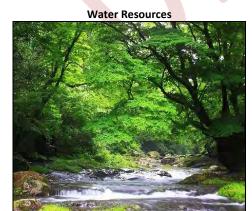
This "briefing booklet" has been prepared as part of the process of preparing an update to the 2008 Plan of Conservation and Development (POCD) for Branford. This booklet is intended to familiarize the members of the POCD Update Committee and others existing and potential future strategies related to natural resources.

### What Are "Natural Resources"?

For the purposes of the POCD, the term "natural resources" is considered to include:

- Water resources (including surface water and groundwater)
- Land / soil resources
- Air resources
- Biologic resources (plants and animals)

Protecting natural resource is important since doing so helps promote overall environmental health, preserve environmental functions, enhance community character, and enhance the overall quality of life.





#### **Natural Diversity Database**

The Connecticut Department of Energy and Environmental Protection (CT-DEEP) maintains a Natural Diversity Database (NDDB) in order to help public agencies protect important resources such as. known locations of:

- endangered species,
- threatened species,
- species of special concern,
- significant natural communities,
- scenic areas, and/or
- unique natural assets (waterfalls, caves, etc.)..

In some cases, the exact locations are masked to protect sensitive species from collection and disturbance.

### **Possible Verbs**

- Preserve
- Protect
- Enhance
- Prioritize
- Manage

## Background

### **Inventory**

The map on the facing page shows the location of some of the important natural resources in Branford:

Land-Related Resources	<ul><li>Steep slopes</li><li>Stratified drift aquifer areas</li></ul>
Water-Related Resources	<ul> <li>Waterbodies / watercourses</li> <li>Wetlands</li> <li>Inland / riverine floodplains</li> </ul>
Biologic-Related Resources	<ul> <li>Plant and animal habitats</li> <li>Natural Diversity Database Sites</li> <li>Vernal pools</li> </ul>
Air-Related Resources	Everywhere

#### Assessment

Branford prepared a Natural Resources Inventory in 2003 and the 2013 update noted that Branford continued to enjoy a relatively high quality of natural resources. The report noted that threats to natural resources might arise from:

- Stress from growth / development.
- Sea level rise / climate change.

At the community meeting held at the start of the planning process, participants identified the following natural resource issues as being important:

- Protection of water quality.
- Protection of the overall eco-system (habitats, air quality, bio-diversity, invasive species, etc.).
- Averting threats to natural resources as a result of development.

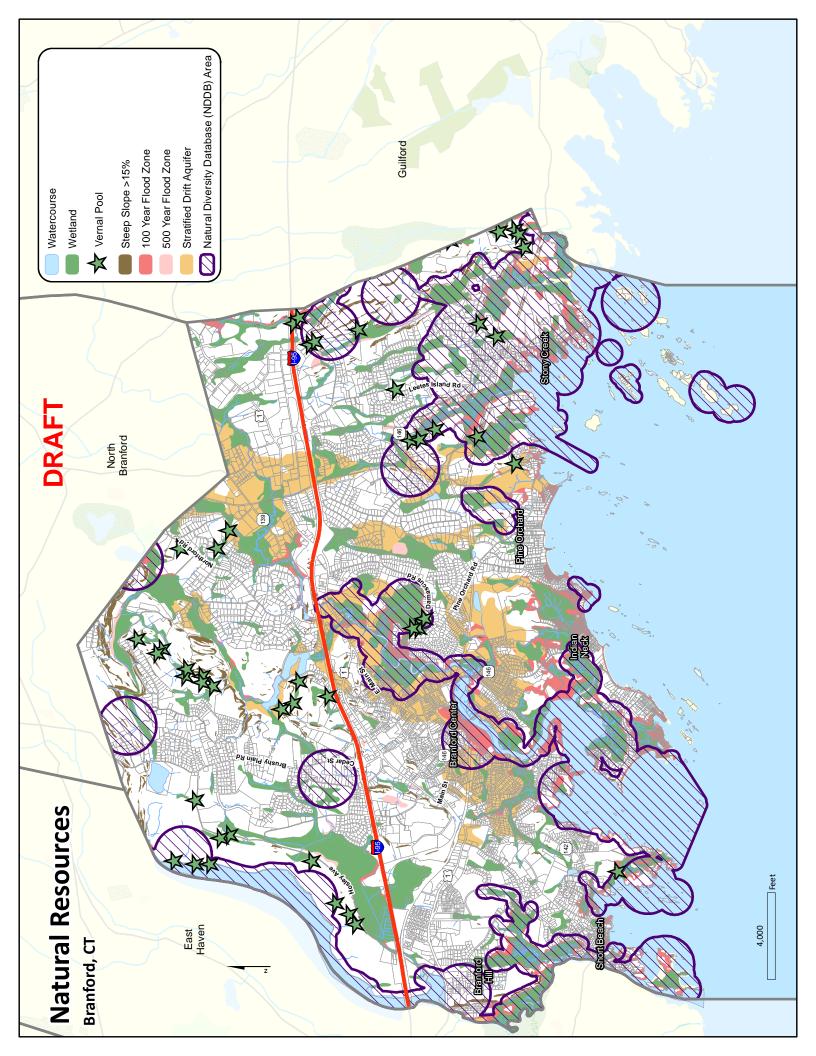
### **2008 POCD**

**GOAL** Minimize impact on natural resources from human activities.

**STRATEGIES** Protect Water Quality

**Protect Biologic Resources** 

**Protect Air Quality** 



## Possible Strategies For 2018 POCD

2008 KEY STRATEGY

## **Maintain and Improve** Water Quality

A.	A. Maintain And Improve Overall Water Quality				Comments
	<ol> <li>Continue <u>programs and efforts</u> to <u>maintain and</u> improve water quality <u>- including drinking water</u> <u>supplies</u>, <u>surface waters</u>, and <u>groundwater</u>.</li> </ol>			*	
		a.	<u>Promote</u> sewage pump out boats, land use agency coordination, the Branford River Project, storm drain marking, etc.		Seems too detailed.
		b.	Develop more stringent water quality standards for properties along the coast.		Not sure what this means or how it would be implemented
	2.		scourage the use of chemical fertilizers and sticides.		

The 5-Year POCD Update reported that the Branford Recreation Department is a national trend-setter in the use of organic fertilizers for all playing fields and playgrounds.

В.	Address Stormwater Quality Comments				Comments
	1.		ntinue <u>programs and efforts</u> to improve <u>rmwater</u> quality.		
		a.	Review and update Section 6.9 of the Zoning Regulations to incorporate specific "low im- pact development" (LID) standards (such as those contained in Section 7.4 of the Connecti- cut Stormwater Quality Manual (2004), as amended).		The utility infrastructure section of the POCD will likely include a map of "hydrologic soils groups"
		b.	<u>Prepare a plan to retrofit</u> existing stormwater management systems utilizing modern water treatment <u>approaches such as LID</u> .		
		c.	<u>Complete "marking" of storm drains so people</u> <u>know that material flowing into such drains af-</u> <u>fects water quality downstream.</u>		
	2.		ntinue to maintain and implement Branford's ormwater Management Plan.		Part of the "MS4" General Permit for Branford

C.	Improve Erosion And Sedimentation Control		Comments
	1.	Eliminate (or reduce) erosion and the resulting sedimentation of catch basins, drainage pipes, culverts, wetlands and waterways.	
	2.	Continue to require implementation and maintenance of erosion and sedimentation controls.	

# **Address Water Quantity And Inland Flooding Issues**

NEW STRATEGY

See briefing booklet on Coastal Issues for discussion of strategies related to coastal flooding.

A.	Add	dres	s Water Quantity And Inland Flooding Issues	Comments
	<u>1.</u>		dress water quantity and flooding issues in and areas in terms of:  managing new development, and updating existing drainage systems / culverts.	*
		a.	Revisit design criteria for stormwater systems to reflect the changing frequency and intensity of storm events.	
	2.		ntinue to participate in the National Flood urance Program.	
	3.		less in strict accordance with the National od Insurance Program:  Prohibit construction of new structures or expansion of existing structures within the inland 100-year flood zone.  Discourage development in flood prone areas including construction of new structures or expansion of existing structures within the inland 500-year flood zone.	
	4.		ek to reduce flood insurance premiums for anford properties.	
		a.	Participate in the Community Rating System program in order to enable Branford properties to be eligible for lower flood insurance premiums.	Relocated from Utilities
		b.	Implement flood hazard reduction programs	Relocated from Utilities

The 5-Year POCD Update reported that the RTM adopted updates to the Flood Ordinance.

NEW STRATEGY

## **Protect Other Important Natural Resources**

A.	Protect Important Land-Related Resources	Comments
	Continue to protect steep slopes from development pressures.	:
		·
В.	Protect Important Water-Related Resources	Comments

The 5-Year POCD Update reported that the Parks and Open Space Commission, in cooperation with the Conservation Commission, conducts annual invasive plant removal and litter pick up events.

C.	. Pro	otect Important Biologic-Related Resources Co	omments
	1.	Protect important plant and animal habitats listed on the State's Natural Diversity Database.	
		a. <u>Ensure that</u> habitat area protection strategies <u>are adequately addressed</u> in local regulations.	
		b. Continue to protect the unique habitats pro- vided by vernal pools.	
	2.	Encourage the preservation, maintenance, and planting of trees for their environmental, runoff, and visual benefits.	
	3.	Continue to require the use of native species (and discourage invasive species) in Branford.	

D.	, Pro	otect Important Air-Related Resources	Comments
	1.	Promote efforts to maintain and improve air quality.	Enforcement is challenging
		<ul> <li>a. <u>Continue to consider</u> land use strategies (transit-oriented development and mixed use) to re-duce vehicle emissions.</li> </ul>	
	2.	Discourage the idling of vehicles with internal combustion engines.	
		a. Continue to evaluate air quality impacts, such as dust and odors that may result from new development.	Evaluate seems like a weak word

# **Maintain The Natural Resources Inventory**

NEW STRATEGY

A.	A. Protect Important Natural Areas		Comments
	1.	Maintain and update the Natural Resource	
		Inventory as needed.	

Are there any other policies or action steps you believe should be included in Branford's natural resource protection strategies?  If so, please make notes below.

### **Reference Materials**

- 1. Branford Plan of Conservation and Development (2008)
- 2. Natural Resources Inventory (2003) and 2013 Update
- 3. Inland Wetland Regulations
- 4. Inland Wetlands Department website / information
- 5. Branford Vernal Pool Study (2002)
- 6. A Salt Marsh Advancement Zone Assessment (2014)
- 7. Zoning Regulations
- 8. Stormwater Management Plan (2017)

Notes & Comments