

Managing Environmental Impacts of Private Docks

A Connecticut DEP
Perspective



Managing Docks & Piers Workshop

May 22, 2007


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Why does DEP regulate private recreational docks?



Because many users depend on coastal resources and their activities are not always compatible!

Some use coastal resources for their livelihood.



Some use coastal resources for recreation.



Some use coastal resources
for habitat.



Regulation is necessary to:

- ensure that development proceeds in a sustainable manner
- protect traditional and water-dependent uses
- Minimize private encroachments
- avoid navigational congestion and minimize riparian conflicts

How Do We Regulate Docks?



Legislative Background For Coastal Activities

- Structures, Dredging & Fill Act – 1939
- Tidal Wetlands Act – 1969
- Conn. Coastal Management Act – 1980

How does the CCMA work?

- Enforceable policies provide backbone
- Defines "coastal resources"
- Defines "adverse impacts"
- Includes "coastal use policies"
- In order to recommend approval, analysts must determine that a project is consistent with policies of the Act

What are Connecticut's coastal resources?



BEACHES & DUNES



COASTAL WATER



COASTAL HAZARD AREAS



TIDAL WETLANDS



INTERTIDAL FLATS



BLUFFS & ESCARPMENTS



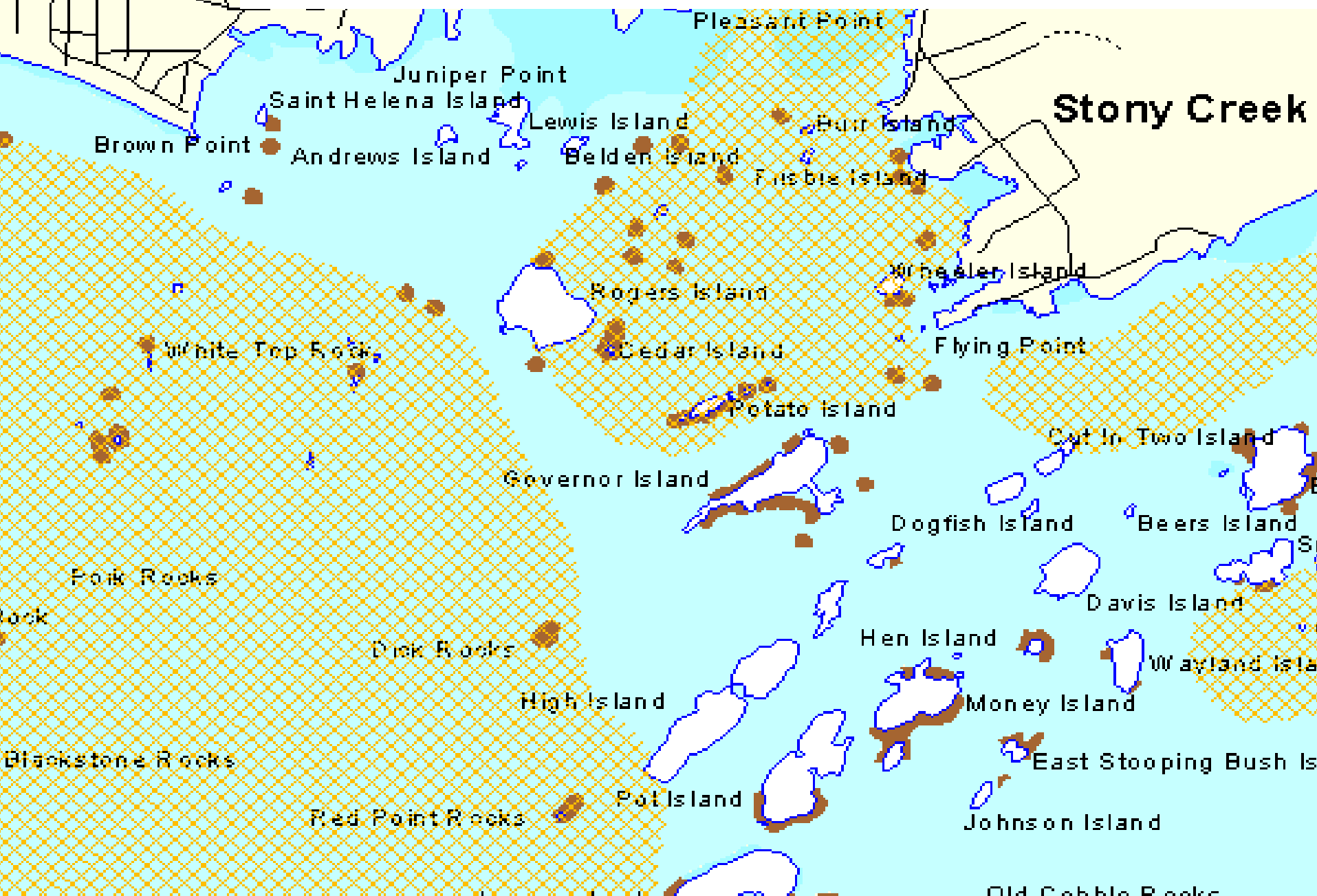
ISLANDS



ROCKY SHOREFRONT



SHELLFISH CONC. AREAS



SUBMERGED AQUATIC VEG.



WATER-DEPENDENT USES





GENERAL COASTAL RESOURCES





HOW DOES THE DEP
PROTECT COASTAL
RESOURCES WHEN
PERMITTING DOCKS?

Regulatory Processes for New Private Recreational Docks

- Structures, Dredging & Fill Permit
- Tidal Wetlands Permit
- General Permit for "4/40 Docks"

Review Process:

- Identify the coastal resources on-site using coastal resource definitions, maps, application, and site inspection
- Consider coastal use policies to determine if there are specific policies related to the proposal
- Consider potential environmental impacts to determine significance

Adverse Impacts

- Statutorily defined
- Magnitude of impacts is dependent upon the size, nature and location of project
- Minimization of adverse impacts is required to prevent “significant” long-term degradation of coastal resources

Adverse Impact Examples

"Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function." CGS Sec. 22a-93(15)(H)

Adverse Impact Examples

"Degrading or destroying essential wildlife, finfish or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat."

CGS Sec. 22a-93 (15)(G)

DEP REGULATORY APPROACH

- AVOID THE IMPACTS
- MINIMIZE THE IMPACTS
- MITIGATE THE IMPACTS

- RESULTING ACTIVITY MUST CONFORM TO STATUTORY CRITERIA THAT ALLOWS DEP TO APPROVE

THE GREAT BALANCING ACT



Applicant's Right
to Wharf Out

Protection of Coastal
Resources

Examples of the “Balancing Act in Action”



(REMEMBER ... AVOID,
MINIMIZE, MITIGATE)

AVOID:

LIMIT ONE DOCK TO EACH PROPERTY



AVOID:

RECOMMENDING SHARED DOCKS WHERE
APPROPRIATE



AVOID: BY PROPER SITING



DOCK SETBACK FROM TIDAL WETLANDS

AVOID:

BY DISALLOWING NEW DREDGING
FOR PRIVATE DOCKS

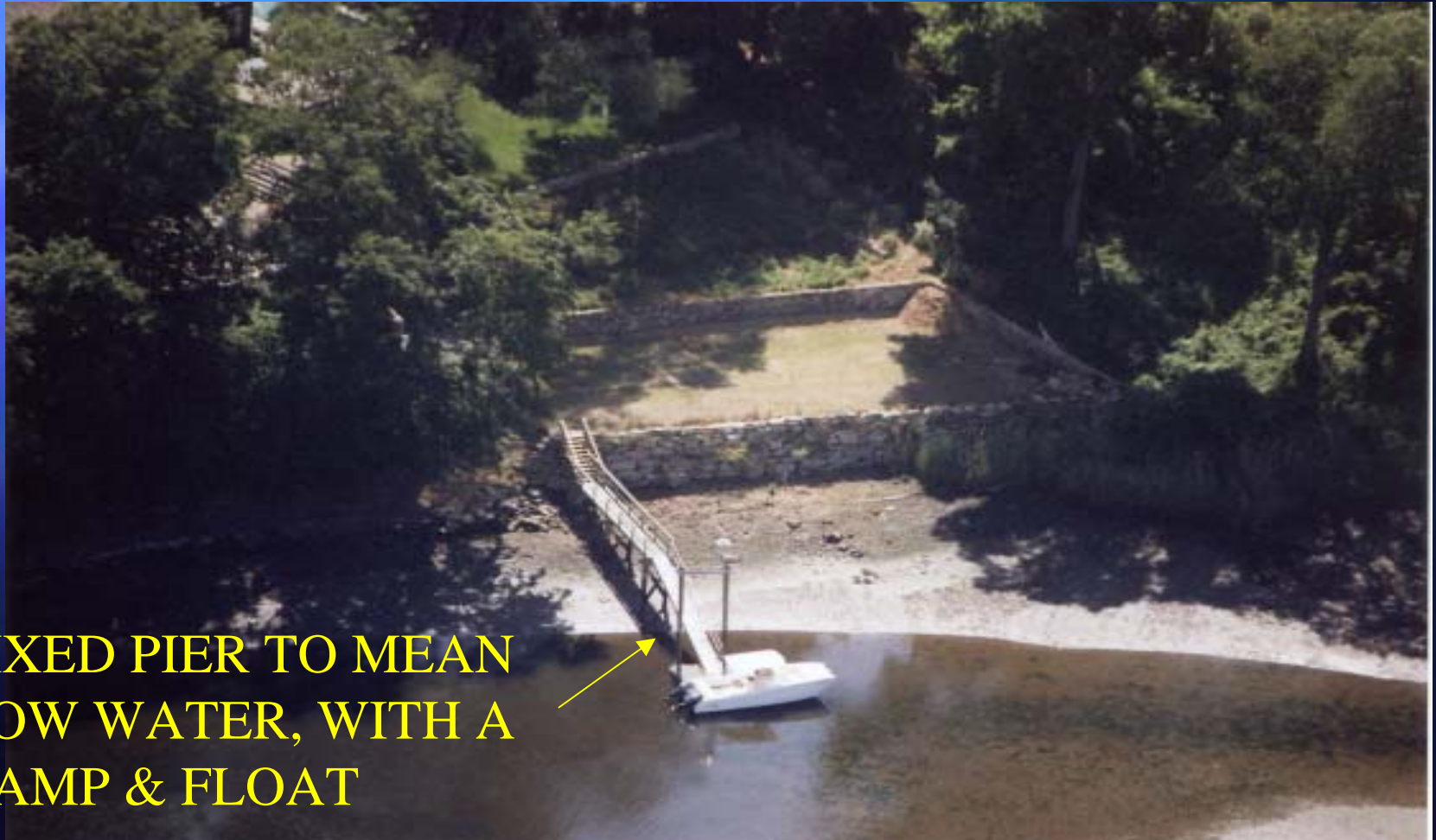


MINIMIZE:

ONLY ALLOW THE SMALLEST DOCK
NECESSARY



MINIMIZE: USE OF STANDARD DOCKS



FIXED PIER TO MEAN
LOW WATER, WITH A
RAMP & FLOAT

MINIMIZE: DOCK DESIGN



100 SQUARE FOOT FLOAT

MITIGATE: BY PROPER DOCK DESIGN



DOCK ELEVATED OVER AREA OF
WETLAND GRASSES

MITIGATE: BY PROPER DOCK DESIGN



DISALLOWING DOCKS IN
WETLANDS THAT DO NOT
ALLOW SUNLIGHT
PENETRATION

MITIGATE: BY PROPER DOCK DESIGN



SHADING IMPACT IN AREA OF SAV REDUCED
THROUGH USE OF BOAT-LIFT

MITIGATE:
BY ENSURING APPROPRIATE
CONSTRUCTION SETBACKS



(THIS IS BAD.)

MITIGATE:
BY PREVENTING CONSTRUCTION-
RELATED IMPACTS



WORK BARGE REQUIRED TO BE IN DEEPER WATERS
DURING LOW TIDE CONDITIONS

MITIGATE: BY RESTRICTING CERTAIN WORK DURING ECOLOGICALLY SENSITIVE PERIODS



WINTERING
EAGLES



SHELLFISH SPAWNING



PIPING PLOVERS

HORSESHOE CRABS

MITIGATE: SEASONAL REMOVAL



RAMPS AND FLOATS SHOULD BE STORED ON
THE UPLAND DURING NON-BOATING SEASON

MITIGATE: SEASONAL REMOVAL



RAMP AND FLOAT STORED ON UPLAND
DURING THE WINTER MONTHS

Where do we go from here?



"Pier-Pressure" Continues

- Avg. number of NEW dock applications per year has increased 53% since 1985
- Significant number of unauthorized structures out there (but we're finding them!)
- Few coastal waterbodies left in CT that have no docks



SMITH COVE/
NIANTIC RIVER
EAST LYME, 1980



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SMITH COVE/
NIANTIC RIVER
EAST LYME, 2005

LOOKING FORWARD ...



- Better Understanding of Cumulative Impacts
- Considerations for Sea-Level Rise & Protection of Coastal Hazard Areas
- Evolving Scientific Knowledge Base Regarding Direct Impacts

Cumulative Dock Impacts: How many docks are "too many?"



Cumulative Dock Impacts:

How does pressure-treated lumber affect sensitive areas?



Direct Dock Impacts:

Floats resting on bottom during low tide conditions

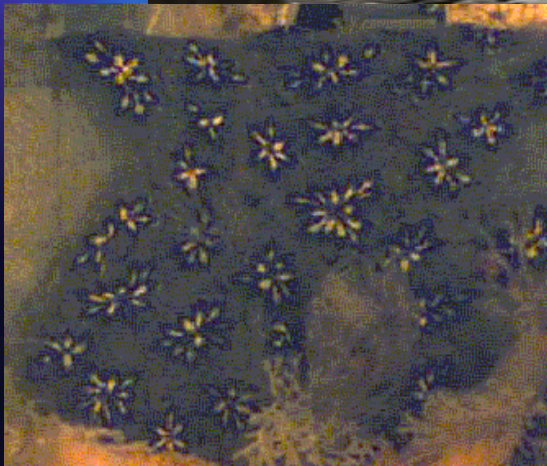


FLOATS AFFECT BENTHIC PRODUCTIVITY BOTH UNDER AND ADJACENT TO FLOAT

Cumulative Dock Impacts: Visual impacts associated with “clutter”



Dock Impacts: Platforms for invasive species?



OUR GOALS INCLUDE:

PROCEDURAL CERTAINTY

FASTER PERMITTING TURNAROUND

BETTER ENVIRONMENTAL OUTCOMES

CONTINUED PROTECTION OF WATER-DEPENDENT USES

A WELL-MANAGED COAST!

FOR MORE INFORMATION, PLEASE CONTACT:

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