Managing Environmental Impacts of Private Docks

A Connecticut DEP Perspective
Managing Docks & Piers Workshop
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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
ROCKY SHOREFRONT
SUBMERGED AQUATIC VEG.
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

SMALL DOCK
BIG DOCK
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

Photos courtesy of NOAA, USFWS
MITIGATE: SEASONAL REMOVAL

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

Photos courtesy of James F. Reinhardt, Robert B. Whitlach, Richard W. Osman and Stephan Bullard
OUR GOALS INCLUDE:

PROCEDURAL CERTAINTY
FASTER PERMITTING TURNAROUND
BETTER ENVIRONMENTAL OUTCOMES
CONTINUED PROTECTION OF WATER-DEPENDENT USES

A WELL-MANAGED COAST!
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