

Climate Adaptation Academy Fact Sheet #4

Flood & Erosion Control Structures

Connecticut Sea Grant
Avery Point Campus
1080 Shennecossett Rd.
Groton, CT 06340

860-405-9106
clear@uconn.edu
climate.uconn.edu

This fact sheet was written by Audrey Elzerman, Rhode Island Sea Grant Law Fellow, in association with the Marine Affairs Institute at Roger Williams School of Law and Rhode Island Sea Grant Legal Program.

Adapt CT is a partnership of the Connecticut Sea Grant Program and the Center for Land Use Education and Research (CLEAR).

Much of Connecticut's shoreline is protected from coastal flooding and erosion by flood and erosion control structures. This section discusses two common types of shoreline control structures, the permitting process for individuals to build or modify these structures in Connecticut, and potential liability related to these structures.

Types of Flood and Erosion Control Structures

There are a wide variety of flood and erosion control structures. These include structures placed in the water, along the shoreline, or inland, and they include "hardening" or "green infrastructure" approaches. Connecticut has defined "flood and erosion control structure" in the Coastal Management Act as "any structure the purpose or effect of which is to control flooding or erosion from tidal, coastal or navigable waters and includes breakwaters, bulkheads, groins, jetties, revetments, riprap, seawalls and the placement of concrete, rocks or other significant barriers to the flow of flood waters or the movement of sediments along the shoreline."¹ Certain types of structures are excluded from the definition, including "any activity, including, but not limited to, living shorelines projects, for which the primary purpose or effect is the restoration or enhancement of tidal wetlands, beaches, dunes or intertidal flats."² This definition only applies to structures partially or fully within the coastal boundary, which includes coastal lands and state waters.

Seawalls and breakwaters are two types of flood and erosion control structures of interest to stakeholders that are built on the shore and in the water, respectively. The location and design of these and other flood and erosion control structures produce different permitting requirements and liability implications.

Seawalls are hard structures, built on land or intertidal areas, meant to curtail flooding or erosion in specific areas, which are often private residential or commercial properties and built structures.³ Seawalls cause adverse impacts on the shoreline because they limit the natural ability of the beach and dunes to move, resulting in erosion in front of the structure.⁴ Due to this effect, seawalls are strictly regulated by DEEP, and the Connecticut Coastal Management Act policies discourage their use except where necessary and unavoidable.⁵ Other hard armoring approaches, like revetments and groins, are similarly regulated by the state.

By contrast, breakwaters are built in the water, parallel to the shoreline, to break up continuous wave action before it reaches the shore, thereby reducing the effect of shoreline erosion while still allowing some longshore sand movement.⁶ While most often deployed to protect harbor or

anchorage areas, they may be designed to achieve other coastal protection outcomes, including to encourage sand deposition and to buffer erosion caused by storms. Some submerged structures, such as reef balls, may fall into the living shorelines exemption from the definition of flood and erosion control structures. However, federal, state, and/or municipal permits or approvals are required before these structures may be installed, regardless of their living shorelines status.

Regulation of Shoreline Flood and Erosion Control Structures

Various federal, state and local regulations govern the construction and maintenance of flood and erosion control structures. A structure's location and design will govern permitting and oversight. Any unauthorized or unapproved activity may be considered a public nuisance, and DEEP may order the activity stopped and/or the structure removed.⁷

Federal Permitting

The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into navigable waters pursuant to Section 404 of the Federal Water Pollution Control Act ("Clean Water Act") and Section 10 of the Rivers and Harbors Act of 1899.⁸ Corps jurisdiction extends up to the high tide line.⁹ If a federal Section 404 permit is required for a fill project within the State, DEEP also requires a Water Quality Certification to accompany the section 404 permit application, pursuant to section 401 of the Clean Water Act.¹⁰

DEEP Permitting

Any person wishing to construct or maintain a flood and erosion control structure; dredge; or place fill waterward of the coastal jurisdiction line (CJL) must submit an application to and receive a permit from the Department of Energy and Environmental Protection (DEEP).¹¹ New construction and other work that requires a detailed review of potential environmental impacts will require an individual permit.¹² Minor activities, where environmental impacts are small or are generally known, may proceed under the terms of a general permit.¹³ Minor projects, including repair of a flood and erosion control structure, are presumptively approved so long as the dredge and fill activity would "(A) cause minimal environmental effects when conducted separately, (B) cause only minimal cumulative environmental effects, (C) not be inconsistent with the considerations and the public policy . . . , (D) be consistent with the policies of the Coastal Management Act, and (E) constitute an acceptable encroachment into public lands and waters."¹⁴ In some cases, DEEP may approve other maintenance or minor expansion work not covered in these exceptions through issuance of a Certificate of Permission.

Municipal Approval

The Connecticut Coastal Management Act requires that local municipalities review and approve flood and erosion control structures to be constructed within the coastal boundary. This review requires submission of a coastal site plan, and approval of that site plan, by the municipal zoning commission.¹⁵

In determining whether to approve a coastal site plan, the zoning commission must first consider whether the potential adverse impacts of the activity on coastal resources and future development are acceptable.¹⁶ Coastal site plans for flood and erosion control structures must be approved "if the record demonstrates and the commission makes specific written findings that such structure is necessary and unavoidable for the protection of infrastructural facilities, cemetery or burial grounds, water-dependent

uses fundamental to habitability or primary use of such property or inhabited structures or structure additions constructed as of January 1, 1995, that there is no feasible, less environmentally damaging alternative and that all reasonable mitigation measures and techniques are implemented to minimize adverse environmental impacts.”¹⁷ Each coastal site plan also must be submitted to DEEP for review and comment, and the commission must consider DEEP comments.¹⁸ Zoning commissions, however, are under no statutory obligation to follow DEEP comments, and if a commission approves a project without complying with the requirements for approval of a flood and erosion control structure, DEEP must appeal in court to challenge the site plan approval.¹⁹ The zoning commission may approve, modify, condition or deny any activity proposed by the plan once all requirements have been met.²⁰

Permitting differences: Seawalls versus Breakwaters

Differences in permitting requirements for seawalls and breakwaters may illustrate how permitting works in practice for different types of flood and erosion control structures. Breakwaters, by definition, are placed in the water and will require both a section 404 permit and a DEEP permit. Submerged lands are also within the coastal boundary and therefore require coastal site plan review. The scope of that review depends on whether the breakwater will have the “primary purpose or effect” of restoring or enhancing “tidal wetlands, beaches, dunes or intertidal flats.”²¹ If so, the structure is not regulated as a “flood and erosion control structure” and may be approved without a showing that it is necessary and unavoidable. If the breakwater does not qualify for the exemption, it will be considered a flood and erosion control structure and subject to the associated review.

Permitting for seawalls depends on where they are located. Seawalls located below the CJL will in most cases require both a DEEP permit and a federal Section 404 permit.²² Conversely, no permit is required from either DEEP or the Corps for a seawall located above the CJL and high tide line. Municipal approval is required through the coastal site plan review process for all seawalls, regardless of location relative to the waterline. All seawalls will be considered flood and erosion control structures to be approved only if necessary and unavoidable.

Selection of a flood and erosion control structure may benefit from advance consideration of permitting requirements as well as the needs of a particular area and the impacts associated with a given flood and erosion control structure.

Liability Implications of Seawall Construction

Seawall construction and maintenance may give rise to a number of questions related to the liability of governments and property owners. This may be particularly true in a “missing tooth” scenario where seawalls are present on each side of a shoreline property, thereby focusing wave energy and erosion on the property in the middle or in cases where new or expanded construction of shoreline armoring causes erosion or flooding on neighboring property.

Can the state or a town be sued for denial of a seawall permit?

Denial of a permit for construction of a seawall may lead a property owner to consider lawsuits to challenge the permit process and decision or to seek damages from the loss of property. Facial challenges to Connecticut permit requirements are unlikely to succeed because state courts have upheld the Coastal Management Act against such challenges by property owners. As a result, successful

challenges to the permit would need to allege a failure during the permitting process, such as denial of a permit for a structure that is “necessary and unavoidable.” A successful suit of this type would most likely result in reconsideration and likely issuance of the permit rather than financial penalties.

As more thoroughly discussed on the “negligence” and “takings” fact sheets, lawsuits seeking damages from the state or town would likely be based on a theory of takings because Connecticut and its municipalities are shielded from tort liability related to permitting decisions.²³ Connecticut courts have yet to consider whether a denial of a coastal site plan could be a regulatory taking. However, such cases would be unlikely to result in a *per se* taking unless denial would destroy all use of the property—unlikely given the provision requiring approval of “necessary and unavoidable” structures. Absent a *per se* taking, courts would conduct a fact-based inquiry that considers the degree of diminution of the value of the land; the nature and degree of public harm to be prevented by denial of the permit; and the alternatives available to the property owner.²⁴

Can a property owner be sued by her neighbors for constructing or failing to maintain a flood and erosion control structure?

Flood and erosion control structures also raise the potential for lawsuits among neighbors. For example, a neighbor’s sea views may be restricted by a berm, or a seawall may be breached as a result of failure to maintain it. This section reviews some potential theories of liability under these two scenarios.

Right to a view

Coastal property owners have tried several means to limit the actions of their neighbors in order to protect their views. These efforts have been largely unsuccessful, such that there are few legal avenues limiting construction of flood and erosion control structures for view-related reasons.

There is no common law or statutory legal right to the free flow of light and air from neighboring properties.²⁵ When a property owner builds a structure on his property that serves a useful and beneficial purpose, a neighboring property owner cannot successfully claim damages under property law for interference with her right to light and air or her view.²⁶ Likewise, plaintiffs have no constitutionally protected right to a view under the fourteenth amendment, which grants citizens the right to due process when a property interest is threatened.²⁷ In *Puckett v. City of Glen Cove*, the U.S. Second Circuit Court of Appeals rejected this theory, finding that “a plaintiff cannot claim a constitutionally protected property interest in uses of neighboring property on the ground those uses may affect market value of plaintiff’s property.”²⁸

Municipalities may, however, protect light and air access by enacting zoning regulations that require setbacks or limits on structure heights. Some Connecticut towns do protect shorefront views through zoning. For example, the Stratford, Connecticut, zoning regulations require a view lane on water front properties for “maximum view of the water from the nearest public street,” and they limit permanent obstructions in view lanes to no higher than four feet tall.²⁹

Liability for Seawall Maintenance and Erosion

Creation of a seawall may affect neighboring property owners, including by pushing waves onto neighboring properties and causing erosion there. Similarly, declining to build or failing to maintain a seawall may allow erosion behind a seawall constructed by a neighbor. In these and other cases, property owners may wish to seek damages or an injunction against their neighbors under several legal

theories, including for violating the duty to provide lateral support, for trespassing, and/or for creating a private nuisance.³⁰

Property owners have a right to lateral support, which is the right have their land physically supported in its natural state by adjoining land.³¹ However, this duty does not extend to furnishing support lost due to an act of nature. The Connecticut Supreme Court held in *Carrig v. Andrews* that loss of lateral support through an act of nature, such as erosion caused by a hurricane, results in no duty on neighbors to refurnish that support.³² Under this holding, the duty of lateral support are not likely to result in liability to neighboring landowners in Connecticut in claims based on erosion related to seawalls.

Neighbors may also bring suit under theories of trespass and private nuisance. These two claims are related but distinct: trespass involves interference with *exclusive possession* of property, while private nuisance involves interference with the *use and enjoyment* of property.³³ A single action may give rise to both claims; for example if an owner floods a neighbor's property, the flood waters interfere both with the neighbor's exclusive possession and her use of the property.³⁴

A tort action for trespass requires the plaintiff to establish four elements in Connecticut: "(1) ownership or possessory interest in land by the plaintiff; (2) invasion, intrusion or entry by the defendant affecting the plaintiff's exclusive possessory interest; (3) done intentionally; and (4) causing direct injury."³⁵ The invasion must be "physical and accomplished by a tangible matter,"³⁶ which includes water and other matter above or below ground.³⁷ Erosion caused by seawater would likely be considered direct injury, such that discharge of seawater onto a neighbor's property may result in a trespass.³⁸

"A private nuisance is a nontrespassory invasion of another's interest in the private use and enjoyment of land."³⁹ To recover damages in a private nuisance claim, "a plaintiff must show that the defendant's conduct was the proximate cause of an unreasonable interference with the plaintiff's use and enjoyment of his or her property. The interference may be either intentional . . . or the result of the defendant's negligence."⁴⁰ A determination about unreasonableness must recognize that "some level of interference is inherent in modern society," such that "the question of reasonableness is whether the interference is beyond that which the plaintiff should bear . . . without being compensated."⁴¹ A property owner who wishes to bring a trespass or private nuisance claim against a neighbor must demonstrate that her neighbor's seawall is causing an unreasonable interference with her use and enjoyment—for example, by causing erosion.

No Connecticut cases have yet addressed questions of nuisance based on seawall construction or maintenance, but such questions have been raised elsewhere. For example, a series of cases in Washington state assessed claims under both nuisance and trespass by a plaintiff against a neighbor for causing seawater flooding as a consequence of increased seawall height. Over multiple decisions, the courts held that the suit could proceed although the defendant had obtained a permit to increase the seawall's height, but that the plaintiff failed to produce evidence of substantial harm required for the trespass claim to succeed.⁴² Similarly, Massachusetts courts have allowed nuisance, trespass, and negligence claims arising from erosion related to construction of groins and revetments.⁴³ In each such case, determination of claims has been fact-specific, requiring a factual basis for the causation and substantiality of the harm to the plaintiff, whether that harm takes the form of erosion or water intrusion. The existence of a state permit for the activity has not barred recovery in these cases; on the

other hand, violation of permit conditions, including the duty to maintain a seawall, could be relevant factors supporting liability determinations in future decisions.

The outcome of similar cases brought in Connecticut courts will likely turn on similar factual disputes, and flood and erosion control structures that impose greater risks of coastal erosion and increased storm surge—such as seawalls—are likely to present heightened risk of civil liability to property owners than less hardened structures, such as breakwaters.

Questions Answered

In November 2015, Connecticut Sea Grant and CLEAR held a workshop on the legal aspects of climate adaptation. Participants were asked to write down questions or issues they had about the topic. Over fifty questions were asked and a complete list can be found on the Adapt CT website at <http://climate.uconn.edu/caa/>. **This Fact Sheet answers the following questions from the workshop:**

Government Action:

8. In the reverse of Sams, what is the Town's/State's obligation to approve (or) liability if it denies a hardened structure/seawall to address the "broken tooth", the gap in a seawall where one or two properties are not protected and rising waters have an increased impact?

Property/Permitting

2.Re: The water view destruction and compensation...a storm protection dune blocking the home owner's view, Borough of Harvey Cedars vs. Karan. Is there a common law right to water views existing at a certain point in time? I didn't think so.

3. Since all beach restorations, new dunes or large berms will be washed away, does it make sense to consider break waters parallel to the shore to break the force of waves and is that legally possible?

12. Property owners A and B have a common seawall that is destroyed by a storm. Owner A rebuilds, owner B does not. Another storm event occurs and erodes Owner A land at the AB property line behind A's seawall. Does A have any claim against B?

14. On one of Asst. AG Wrinn's slides it said the seawalls are the death of a beach. If the construction of a seawall has resulted in loss of beach and public trust land, can legal action be taken? Against whom—the property owner, DEEP (DEP) for permitting the structure?

Creation of this fact sheet was supported by a Connecticut Sea Grant Development Fund Award (PD-16-05) and was created in collaboration with:



THE
UNIVERSITY
OF RHODE ISLAND

¹ CONN. GEN. STAT. § 22a-109.

² *Id.*

³ DEEP, *Living on the Shore: Shoreline Protection*, at <http://www.ct.gov/Deep/cwp/view.asp?A=2705&Q=323806>.

⁴ *Id.*

⁵ *Id.*

⁶ U.S. Army Corps of Engineers, COASTAL ENGINEERING MANUAL, EM 1110-2-1100, Part V, at V-3-37 – V-3-57 (2006) (reviewing headland and nearshore breakwater design considerations).

⁷ CONN. GEN. STAT. § 22a-108.

⁸ 33 U.S.C. § 1344(a); 33 U.S.C. § 403.

⁹ See U.S. Army Corps of Engineers, *Jurisdiction* (last visited Nov. 14, 2016), at <http://www.nwp.usace.army.mil/Missions/Regulatory/Jurisdiction.aspx>.

¹⁰ DEEP, *Individual Permits*, at http://www.ct.gov/deep/cwp/view.asp?a=2705&q=323580&deepNav_GID=1635.

¹¹ CONN. GEN. STAT. § 22a-361(a)(1).

¹² DEEP, *Individual Permits*, at http://www.ct.gov/deep/cwp/view.asp?a=2705&q=323580&deepNav_GID=1635

¹³ *Id.*

¹⁴ CONN. GEN. STAT. § 22a-361(d)(1).

¹⁵ *Sams v. State, Dep't of Env'tl. Prot.*, No. CV084016517, 2009 Conn. Super. LEXIS 836, at *8 (Super. Ct. Mar. 26, 2009) (“The power of a local commission to require that an applicant file a coastal site plan, and to reject or impose conditions on its approval, is derived from the CMA.”).

¹⁶ CONN. GEN. STAT. § 22a-106(a). The commission looks at three factors to determine acceptability, including: 1) the characteristics of the site and the location and condition of any of the coastal resources; 2) any potential effects, positive and negative, of the proposed activity on coastal resources and future water-dependent development opportunities; and 3) any conflicts between the proposed activity and any legislative goal or policy identified in § 22a-92. *Id.* at § 106(b).

¹⁷ *Id.* at § 109(a).

¹⁸ *Id.* at § 109(d).

¹⁹ Nicola Pielenz Dowling, No. LIS-2015—3744-V (Nov. 3, 2016) (ruling on motion to dismiss and final decision) (dismissing DEEP order to stop work and abate nuisance arising from work based on coastal site plan approved by town without notice to DEEP or written statement because appeal to court was only proper recourse for agency).

²⁰ CONN. GEN. STAT. § 22a-105(e).

²¹ *Id.* § 22a-109(c).

²² The CJL and high tide lines are very similar and in most cases will not substantially differ in ways that affect permit requirements.

²³ See the related fact sheet, *Governmental Tort Liability for Disclosure of Flood Hazard Information*, for a thorough discussion of this issue.

²⁴ For a more in-depth discussion of government takings, please view the related fact sheet, *Takings and Coastal Management*.

²⁵ *Fontainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc.*, 114 So. 2d 357, 359 (Fla. Dist. Ct. App. 1959)(describing common law principle that landowners have no legal right to unobstructed light and air from adjoining land).

²⁶ *Id.* Connecticut, however, does allow a neighboring property owner to bring a civil action against adjacent landowners who “maliciously erect any structure with an intent to annoy or injure the plaintiff in his use or disposition of his land.” CONN. GEN. STAT. § 52-570.

²⁷ U.S. CONST. amend. XIV, § 1. Connecticut’s constitution mirrors the due process clause, stating, “no person shall . . . be deprived of life, liberty or property without due process of law. . . .” CONN. CONST. art. XVII. If the property owner cannot establish a constitutionally protected interest, there is no due process violation. *Kelley Property Dev., Inc. v. Lebanon*, 627 A.2d 909, 914 (Conn. 1993).

²⁸ 631 F. Supp. 2d 226, 238 (E.D.N.Y. 2009), *citing* *Mehta v. Surles*, 905 F.2d 595, 598 (2d Cir. 1990).

²⁹ STRATFORD, CONN. ZONING REGS. § 3.1.1.3(1)(A).

³⁰ Other theories are also possible but are not discussed here. See Jon A. Kusler and Edward A. Thomas, *No Adverse Impact and the Courts: Protecting the Property Rights of All* 9-25 (2007), available at http://www.floods.org/PDF/ASFPN_NAI_Legal_Paper_1107.pdf (reviewing national theories of liability and cases).

³¹ *Carrig v. Andrews*, 17 A.2d 520, 521 (Conn. 1941).

³² *Id.* at 522 (“The so-called right of lateral support is in essence not an insurance that nothing will happen to adjoining land that will cause an interference with an owner’s or possessor’s right of lateral support, but rather that the adjoining owner or possessor will do no act which will cause such interference. The wrong complained of here is that the defendant, after notice, failed and refused to refurnish lateral support removed, not by his own act, but by an unprecedented act of nature. He was under no such duty.”).

³³ *Boyne v. Town of Glastonbury*, 955 A.2d 645, 652-53 (Conn. App. Ct. 2008).

³⁴ *Id.* at 653, *quoting* RESTATEMENT (SECOND) OF TORTS § 821D, cmt. e (“the flooding of [a] plaintiff’s land, which is a trespass, is also a nuisance if it is repeated or of long duration. . . . The two actions, trespass and private nuisance, are thus not entirely exclusive or inconsistent, and . . . the plaintiff may have his choice of one or the other, or may proceed upon both.”).

³⁵ *Boyne v. Town of Glastonbury*, 955 A.2d at 653; *see also* *City of Bristol v. Tilcon Minerals*, 931 A.2d 237, 258 (Conn. 2007).

³⁶ *Boyne v. Town of Glastonbury*, 955 A.2d at 653.

³⁷ *City of Bristol v. Tilcon Minerals*, 931 A.2d at 258.

³⁸ *Id.* (holding migration of polluted groundwater from landfill to be a trespass); *Day v. Gabriele*, 921 A.2d 692 (Conn. App. Ct. 2007) (upholding trespass claim based on flooding caused by destruction of water discharge pipe).

³⁹ *Pestey v. Cushman*, 788 A.2d 496, 502 (Conn. 2002), *quoting* RESTATEMENT (SECOND) OF TORTS §821D (1979).

⁴⁰ *Pestey v. Cushman*, 788 A.2d at 507.

⁴¹ *Id.* at 508.

⁴² 117 P.3d 1089 (Wash. 2005) (en banc). In this case, the court also held that seawater is not “surface water,” which would be evaluated under a different legal framework. See also *Lummis v. Lily*, 429 N.E.2d 1146 (Mass. 1982) (rejecting common enemy rule for littoral property). While Connecticut has not ruled directly on this point, it would be likely to follow the same analysis. However, if it did find seawater to be surface water, it would analyze the case under the state’s “reasonable use” framework—which would turn on a similar balancing analysis. *Page Motor Co. v. Baker*, 438 A.2d 739 (Conn. 1980).

⁴³ Lummis v. Lily, 429 N.E.2d 1146; Woods v. Brimm, 27 Mass. L. Rptr. 389 (Mass. Super. Ct. 2010); Backman v. Lilly, 1992 WL 12151916 (Mass. Land Ct. May 29, 1992).

Climate Adaptation Academy Fact Sheet #4: CTSG-17-05 March 2017