

RESPONDING TO NUISANCE FLOODING OF COASTAL HIGHWAYS: LEGAL CONSIDERATIONS

Read Porter

Marine Affairs Institute / Rhode Island Sea Grant Legal Program

*2019 CAW-CCAP Annual Meeting: Climate Adaptation
Legal Strategies & Municipal Considerations
May 30, 2019*



THE
UNIVERSITY
OF RHODE ISLAND

THE MARINE AFFAIRS INSTITUTE: ABOUT US



- Located in Bristol, RI at Rhode Island's only law school
- Concentration in ocean and coastal law and policy
- Home of the Rhode Island Sea Grant Legal Program
 - Only Sea Grant Legal Program in northeast
 - Supports informed decision-making by regional coastal stakeholders through applied legal research and analysis
- Joint degree program
 - Juris doctor: RWU School of Law
 - Masters of Marine Affairs: URI (CELS)

RHODE ISLAND SEA GRANT LAW FELLOW PROGRAM



- Matches highly-qualified law students with outside organizations
- Provides legal research and analysis on topics related to ocean and coastal law and policy
- Non-partisan and non-advocacy: no litigation or lobbying

LEGAL FACT SHEETS FOR CLIMATE ADAPTATION IN NEW ENGLAND



Property and Permitting Boundaries at the Shoreline

- CT

Takings and Coastal Management

- CT, RI, MA

Climate Change Impacts on Municipal Negligence Liability

- CT, RI, MA, ME

Flood and Erosion Control Structures

- CT, VT

Nuisance Flooding of Coastal Highways

- CT, RI, MA, NH, ME

Maintenance of Water and Sewer Infrastructure in Response to Sea Level Rise

- MA, NH

Stormwater Flooding: Options for Municipalities

- VT



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THE PROBLEM OF COASTAL HIGHWAYS



COASTAL ROADS ARE VALUABLE!



- “Generally, home buyers are willing to pay a premium for living near the water. Property values are negatively related to distance from the coastline, and this relationship is a nonlinear one in the sense that **the coastal premium is significantly greater at the waterfront**. Both a water view and a wide beach have positive impacts on property values.”
 - Di Jin et al., *Shoreline Change, Seawalls, and Coastal Property Values*, 114 OCEAN & COASTAL MGMT. 185 (2015).
- Coastal property taxes are important for municipal finances and properties must be serviced by roads
- Critical access for recreational uses



COASTAL HIGHWAYS ARE ALREADY AFFECTED BY NUISANCE (“SUNNY-DAY”) FLOODING



“Tidal nuisance flooding across the East Coast of the U.S. threatens 7,508 miles (12,083 km) of roadways and nearly 15,000 individual roadway segments. . . . most of the roadways at risk are not interstates. . . .”

Table 1. Miles of Roadway by State and FC Located in Nuisance-Flood Zones

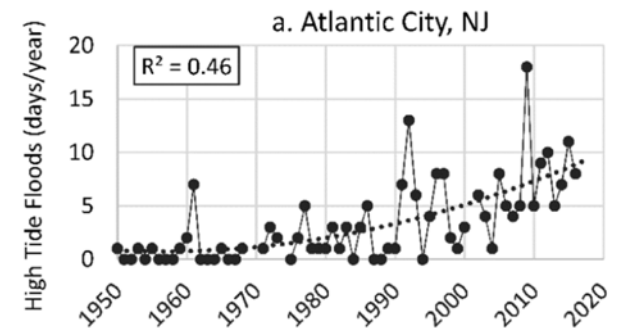
State	Functional Class 1 & 2	Functional Class 1 & 2 ramps	Functional Class 3, 4, & 5	Functional Class 6 & 7	Total	Percent of total road miles
ME	8.7	0.8	188.6	N/A ^a	198.1	2.8%
NH	0.4	0.3	12.4	21	34.2	0.2%
MA	0	7.6	73	159	239.6	0.3%
RI	1.2	1.3	57.4	5.7	65.6	3.1%
CT	5.9	4	117.1	13.8	140.9	1.7%
NY	32	19.3	133	N/A ^a	184.3	0.6%
NJ	77.6	34.3	416.3	7.6	535.8	4.6%
PA	21	14.9	74.1	N/A ^a	110	0.2%
DE	7.7	0.7	58.5	121.5	188.5	2.8%
MD	5.8	1.7	72	548	627.6	1.7%
DC	5.3	3.3	1.2	8	17.7	1.5%
VA	18.7	11.7	145.9	234	410.3	0.6%
NC	3.2	3.3	315.2	1796.5	2118.2	1.4%
SC	31.6	6.4	262.9	288.6	627.2	0.9%
GA	65.4	4.8	53	102	225.3	0.2%
FL	121	52.9	1195.3	453.9	1823.1	4.7%
Total	405.6	167.3	3175.9	3759.6	7508.4	1.1%

Note: 1 mile = 1.61 km.

^aFC 6 and 7 roadway data were missing.

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Jennifer M. Jacobs et al., *Recent and Future Outlooks for Nuisance Flooding Impacts on Roads on the U.S. East Coast*, 2762 TRANSPORTATION RESEARCH RECORD, no. 2, 2018, at 1-10.



William V. Sweet et al., PATTERNS AND PROJECTIONS OF HIGH TIDE FLOODING ALONG THE U.S. COASTLINE USING A COMMON IMPACT THRESHOLD, NOAA Technical Report NOS CO-OPS 086 (2018)

NUISANCE FLOODING IMPACTS



■ Construction and maintenance

- “[C]limate change, if unchecked, will increase the annual costs of keeping paved and unpaved roads in service by **\$785 million** in present value terms by 2050.” Paul S. Chinowsky et al., *Assessment of Climate Change Adaptation Costs for the U.S. Road Network*, 23 GLOBAL ENVTL. CHANGE 764 (2013).

■ Public safety

- “In New England, winter flooding can create sheets of ice on roadways, adding another, dangerous, consequence to street flooding.” Jason McAlpine, *Rising Seas Swallow \$403 Million in New England Home Values*, First Street Foundation (Jan. 22, 2019)

■ Property values

- “It’s not just property lot flooding that leads to home value loss, persistent flooding of nearby roads has a significant impact as well Road flooding affects commutes and school bus access, and because it’s on display for everyone to see, it can give an area a negative reputation.” Jason McAlpine, *Rising Seas Swallow \$403 Million in New England Home Values*, First Street Foundation (Jan. 22, 2019)

■ Disrupted economic activity

- “Some trips will be cancelled because either the origin location or the destination location is flooded. . . . Some trips will not occur because flooding of links has made it impossible for the traveler to get from origin to destination. Many trips that occur despite the flooding will take much longer.” Suarez et al., *Impacts of flooding and climate change on urban transportation: A systemwide performance assessment of the Boston Metro Area*, 10 TRANSP. RES. PART D: TRANSP. & ENV’T 231 (2005).



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THE LEGAL CONTEXT



TYPES OF ROADS



- Multiple road owners:
 - State highways
 - Municipal highways
 - Private roads
- Roads serving different purposes (classification) have different design requirements & uses
- Roads may have different legal status: easement versus fee simple

DUTY TO MAINTAIN



- Owners have a legal duty to maintain their roads
- Towns may be liable for damages resulting from failure to maintain a highway if they:
 - know about the defect; and
 - fail to fix or guard it.
- Regular nuisance flooding could satisfy standard

OPTIONS IN RESPONSE TO NUISANCE FLOODING



- **Elevate or realign** the road so it is no longer flooded
- **Discontinue** the road through a legal process
- **Abandon** the road or **downgrade** classification by non-use/non-maintenance

Availability and details of options differ by state

ELEVATION



- No legal requirements for minimum elevation relative to current or future sea level
- Permits likely required
- Compensation may be required to adjoining landowners:
 - Widening right-of-way
 - Retention of flood waters on private property (“bathtub effect”)

DISCONTINUANCE



- Legislative process by municipality
 - Requires notice to abutters, vote by town government
 - Requires payment of damages to affected landowners
 - *Frustaci v. City of S. Portland*, 879 A.2d 1001 (Me. 2005)
 - N.H. Rev. Stat. 231:49
- Effects:
 - Eliminates duty to maintain / liability
 - Abutters generally retain easement to travel over / maintain the road
 - Town may retain public easement (usually required if necessary to access property)
 - Does not affect utility easement (ME)
 - May affect ability to develop property without access to public road (NH)

ABANDONMENT



- Eliminate road by long period of non-use / non-maintenance
- Towns often use as *defense* to tort claims or maintenance requests
- Maine:
 - Requires determination by courts; presumed after 20-30 years
 - No damages required (contra discontinuance): *Paul v. Town of Liberty*, 151 A.3d 924 (Me. 2016).
 - Not a taking: *Lamb v. Town of New Sharon*, 606 A.2d 1042 (Me. 1992).
 - Right-of-way transfers to abutters or may retain public easement/access
- New Hampshire:
 - Does not allow abandonment, but roads automatically downgraded to Class VI after 5 years without maintenance
 - No liability for non-maintenance; development restricted
 - Requires damages to abutters who are harmed

KEY QUESTIONS TO CONSIDER



- Jurisdiction
 - Whose road is it?
 - Roads cross boundaries: what about neighbors?
 - Will discontinuance or abandonment revert property to abutters?
- Liability: will compensation be required?
 - Loss of access to property? Other damages to abutters?
 - Eminent domain required?
- Permitting: what can be authorized?

THANK YOU!

Acknowledgements:

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