







<p>Drowning in Liability: Reducing climate change impacts through municipal planning and zoning</p>  <p>ADAPT CT PREP-RI</p> <p>1</p>	<p>Juliana: Welcome to “Drowning in liability: reducing climate change impacts through municipal planning and zoning,” part of the online module series “Providing Resilience Education for Planning in Rhode Island,” or PREP-RI, and Adapt CT’s training program for municipal officials.</p> <p><u>Photo credits:</u> S. Harold</p>
<p>Presenters</p> <p>Juliana Barrett, PhD, Coastal Habitat Specialist & Extension Educator, Connecticut Sea Grant & UConn Department of Extension</p>   <p>Bruce Hyde, Land Use Academy Director, UConn Department of Extension & Center for Land Use Education and Research</p>  <p>Andrew Teitz, Esq., AICP, Partner with the law firm Ursillo, Teitz & Ritch, Ltd.</p> <p>ADAPT CT PREP-RI</p> <p>2</p>	<p>Juliana: We’re joined by Bruce Hyde, Land Use Academy Director at the University of Connecticut, and Andy Teitz, Partner with the law firm Ursillo, Teitz & Ritch.</p>
<p>By the end of this module, you will be able to:</p> <ul style="list-style-type: none">- Recognize planning and zoning interests related to flooding at the local level- Describe actions you can take in your role as a thoughtful rule- and decision-maker to reduce liability related to planning and zoning decisions- Identify resources to consult for further information <p><small>Disclaimer: This material is intended for educational purposes only and does not constitute legal advice; please consult your municipal solicitor regarding specific situations.</small></p> <p>ADAPT CT PREP-RI</p> <p>3</p>	<p>Juliana: Many local officials have asked, “How do we stay out of court?” While we can’t necessarily keep you out of court, by the end of this module you’ll be able to recognize the planning and zoning interests related to flooding, describe actions you can take to reduce liability related to planning and zoning decisions, and identify key resources for further information. I’m going to hand it over to Bruce to take it from here.</p>
<p>Why does it matter? People and places are at increased risk</p>   <p>ADAPT CT PREP-RI</p> <p>4</p>	<p>Bruce: So, why does it matter? People and places are at increased risk from more intense storms, more frequent sunny day flooding, and rising seas, among other consequences of a warming atmosphere.</p> <p><u>Photo credits:</u> Darren McCollester/Getty Images (top); Pam Rubinoff/MyCoast RI</p>

Flooding and other climate change impacts have cascading effects



First Responders
Hurricane Harvey, 2017



Fairfield, CT
Superstorm Sandy 2012



Corn Neck Road
Block Island

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Bruce: These impacts negatively affect properties, municipal infrastructure, and the health and safety of residents and emergency responders. They also affect our local economies and natural resources, both of which are tied to tourism and tax revenue.

Photo credits: Left to right: US Army 1st Lt. Zachary West; Brandon Beach/US Army Corps of Engineers; Judy Gray/[RI Beach SAMP](#)

Local planning and zoning boards are frontline decision-makers



South Kingstown, RI



Newport, RI

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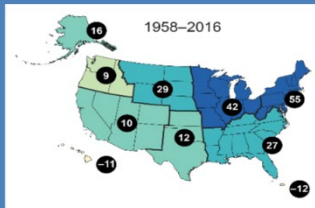
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Bruce: Local boards make decisions that impact what a community will look like for generations to come. You wear multiple hats: you're visionaries when you're doing long-term planning, you're legislators when creating regulations, and you're decision-makers when approving or denying applications that come before you. Good planning and regulatory practices will become even more critical as conditions continue to change.

Photo credits: both photos: Pam Rubinoff

What's happening?

Both increased average annual precipitation and heavy rain events



Newport, RI

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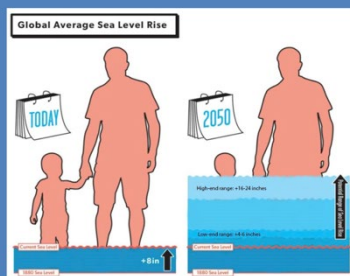
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Bruce: So, what exactly is happening? Warmer air temperatures allow the atmosphere to hold more water vapor. Since 1930 annual precipitation has increased by a dramatic eight inches! Rhode Island and Connecticut are also experiencing more heavy rain events, which are defined as the top 1% of all daily events within a certain time period. A good benchmark for a heavy rain event is a month's worth of rain for a given location falling in one day (in other words, a big event!) In the northeast, such events have increased by 55% between 1958 and 2016.

Photo credits: Left: [NOAA Climate.gov](#); Right: J. Coop

Sea level rise is increasing *and* accelerating



RI
3 feet by 2050
9+ feet by 2100

CT
20 inches by 2050

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Bruce: Sea level rise is increasing. We've already experienced almost a foot of sea level rise since 1930 per the Newport, RI tide gauge records. In Connecticut, the rise in sea level is equivalent to over 11 inches in 100 years. Sea level rise is also accelerating, negatively affecting coastal environments, public and private property, infrastructure and community support systems. In Rhode Island, we can likely expect an additional three feet of sea level rise by 2050, and over nine feet by 2100. These projections are defined by the National Oceanic and Atmospheric Administration, or

NOAA, and have been adopted by the RI Coastal Resources Management Council. Similarly, in Connecticut, the state legislature has accepted projections of 20 inches of sea level rise by 2050. I'm going to hand it over to Andy to take it from here.
 Photo credit: Adapted from the Union of Concerned Scientists, 2014



What can you do?

Clearly incorporate resilience into standards

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Andy: So what can you do as a board member? First, remember that resilience is not the frosting on the cake- it's baked in! It's important to work with your council and other boards to ensure that your plans, policies, and standards support resilience. Take proactive steps to minimize your municipality's liability exposure by ensuring that your Comprehensive Plan, Hazard Mitigation Plan, and other plans and policies are built on science-based information. Refer to vetted state level resources such as Resilient Rhody (Rhode Island's climate resilience plan) and Connecticut's Governor's Council on Climate Change, as well as federal resources. And be transparent: make sure your municipality's standards are very clear to developers and other applicants.

Photo credit: Alie Teitz

Consider climate impacts on infrastructure

Providence, RI
 Bridge elevated to accommodate sea level rise

New Haven, CT
 Bioswale captures and treats stormwater

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Andy: Reduce liability associated with infrastructure by incorporating projected impacts and strategies in your Capital Improvement Plan and other plans and policies. As seen here, the design of this pedestrian bridge incorporated three feet of sea level rise. Bioswales and other green infrastructure capture and treat stormwater. A simple way to better manage and protect infrastructure is to ensure that the most up-to-date flood hazard areas are identified and include data on future conditions.

Photo credits: Left: Janet Freedman; Right: [Long Island Sound Study](#)

Keep assets out of harm's way

Implement approaches such as overlay zones and Low Impact Development

Blue: current flood zone
 Red: expanded flood zone with sea level rise

AGRICULTURAL 22 ACRES
 OPEN SPACE 17.59 ACRES

Through Low Impact Development, Tiverton, RI increased design flexibility while decreasing impacts to important natural areas.

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Andy: Municipal activities that may generate liability concerns include building roads and bridges, installing stormwater facilities, approving subdivisions, and issuing building permits. Many municipalities are already implementing approaches, such as Low Impact Development and overlay zones, as seen here, to reduce impacts. The Association of State Floodplain Managers refers to these types of approaches as "No Adverse Impact," which is essentially a floodplain management approach

that ensures that no actions adversely impact the property and rights of others. Their research shows that communities that use the “no adverse impact” approach can decrease the potential for successful liability suits against them. Also be sure to explicitly state the flood risk findings in your zoning and land use decisions.

Photo credits: RI Transfer of Development Rights Manual

Move assets out of harm’s way



Transfer of Development Rights



Managed retreat



Voluntary buyout programs

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Andy: Other tools include voluntary buyout programs, managed retreat, and Transfer of Development Rights, or TDR. Voluntary buyout programs, often funded in part by federal monies, remove houses and other structures from flood zones to restore the land’s natural functions and values while protecting property owners from harm. Such programs have been implemented in both Rhode Island and Connecticut. Managed retreat is similar to buyout programs but at a larger scale; it’s essentially the strategic relocation of development community-wide to manage risk. This is very similar to TDR, for which there is State enabling legislation. TDR directs development away from environmentally sensitive “sending” areas and into “receiving” areas that have less flood risk.

Photo credits: Left to right: RI Transfer of Development Rights Manual; Pam Rubinoff; E. Krugel

Courts have broadly supported restrictive regulations based on public safety, nuisance prevention, public trust, and other concerns



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Andy: Municipalities have prevailed in regulatory takings cases, which I’ll define in a minute, when the denial of use is based on public safety, nuisance prevention or offsite impacts. Examples might include the condemnation of unsafe buildings, removal of trees infected with a pathogen, or restricting access to a dangerous area such as land in the path of a potentially life-threatening flood.

Photo credits: C. Agrella

Directly address flood impacts in local policies and regulations



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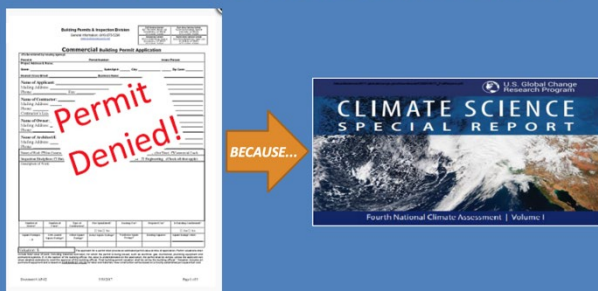
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Andy: Local policies and regulations often do not directly address flood impacts or are not applied “fully” to address our changing landscapes. Therefore, planning and zoning decisions based on flood considerations may be contested if there is not adequate regulation, legal precedence or findings of fact to support them.

Photo credits: Left: Sally Harold

Link decisions to cited scientific studies



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Andy: A generalized statement about public welfare, whether in a zoning ordinance or denial decision, is NOT enough. The ordinance should contain citations of scientific studies that document the danger, and the decision should specifically relate those scientific findings to the particular piece of land. The word “because,” with the following explanation, is always needed in any “finding of fact.”

Avoid “takings”

Physical taking: private property is appropriated for a public purpose

Regulatory taking: denies landowner all use of their property

Compensation required when taking goes “too far”

Pennsylvania Coal Company v. Mahon, 260 U.S. 393 (1922)



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Andy: You want to avoid legal takings, of which there are two types- physical and regulatory. In a physical taking, the government exercises the right of eminent domain to occupy private property for public use such as the building of a road. A physical taking almost always requires the government to pay the owner. A regulatory taking is when the government denies a private property owner all use of their property. The concept was first enunciated by the US Supreme Court in 1922 in the case of Pennsylvania Coal Company v. Mahon. The Court held that whether a regulatory act constitutes a taking requiring compensation depends on the extent of diminution in the value of the property. If a taking went “too far,” then it required compensation. This has developed into the concept that a regulatory taking has to take all or almost all of the value of a property before it becomes compensable.

Show an essential nexus



Court found NO Nexus:
Permit requirement to provide a dedicated public easement as a condition for replacement of bungalow

Nollan v. California Coastal Commission, 483 U.S. 825 (1987)

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Andy: There must be an "essential nexus" between a legitimate state interest and the permit condition which results in the taking. In *Nollan v. California Coastal Commission* in 1987 the US Supreme Court reviewed a Commission requirement that a lateral public easement be dedicated along Nollan's beachfront as a condition of approval to demolish an existing bungalow and replace it with a three-bedroom house. The Court found that the nexus was missing and it was a physical taking, so compensation was due to Nollan.

Photo credits: Jeff Hampton

Avoid total takings by allowing some use of a property



Did not:

- Interfere with the current use
- Prevent it from realizing a reasonable rate of return on investment

Penn Central Transportation Company v. NYC 438 U.S. 104 (1978)

Grand Central Station, NYC

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Andy: As noted earlier, there are ways to avoid total takings, such as by allowing some use of a property and through transfer of development rights. In *Penn Central Transportation Company v. New York City* in 1978, the Court denied a takings claim brought by the owner of [Grand Central Terminal](#) following the refusal of the [New York City Landmarks Preservation Commission](#) to approve plans for the construction of a 50-story office building on top of the Terminal. The court found that the law did not interfere with the current use as a railroad terminal, or prevent it from realizing a reasonable rate of return on its investment, especially since pre-existing air rights were transferable to other parcels in the vicinity, which acted as a form of compensation.

Photo credits: Eric Baetscher

Run the "reasonable investment-backed expectation" test



North Kingstown, RI



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Andy: The "reasonable investment-backed expectation" test may be useful in the climate liability setting. For example, if someone pays only \$25,000 for a waterfront lot, they cannot reasonably expect it to be a buildable homesite given the usually higher priced value of such locations, even when at risk.

Photo credits: Left: Statewide MLS of Rhode Island, Inc.

Know when a regulatory taking is a "total taking"



Chatham, MA

- degree of harm
- social value/suitability
- ease with which harm is avoided

Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992)

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Andy: Other factors that come into play in a "total taking" inquiry include: "the degree of harm to public lands and resources, or adjacent private property... posed by the claimant's proposed activities... or the social value of the claimant's activities and their suitability to the locality in question... or the relative ease with which the alleged harm can be avoided through measures taken by the claimant and

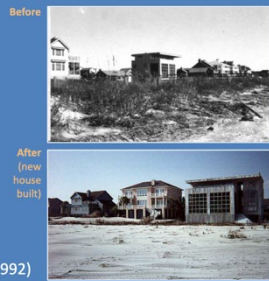
the government (or adjacent private landowners) alike..."

Photo credits: Shannon Hulst

Codifying "background principles"

Landowner cannot create a nuisance by filling in his land in a way that floods his neighbor

State can prevent that filling, or building in a floodplain, if it might reasonably damage public or private property



Lucas v. South Carolina Coastal Council 505 U.S. 1003 (1992)

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Andy: A key case is from the US Supreme Court in 1992, Lucas v. South Carolina Coastal Council. The rationale of the Court was that South Carolina was not enacting completely new restrictions on coastal development, but was simply codifying "background principles" of existing common law.

Remember that term "no adverse impact" from Slide 12? The concept is the same. Under common law, a landowner can't create a nuisance by filling in his land in a way that floods his neighbor. A state can also prevent that filling, or building in a floodplain, for example, if it might reasonably damage the public property or other private property.

Photo credits: Top and Bottom: William A. Fischel. *Lucas v. South Carolina Coastal Council: A Photographic Essay*. Dartmouth College Dept of Economics 1995

Know that changed circumstances or new knowledge may make what was previously permissible no longer so...

Lucas v. South Carolina Coastal Council 505 U.S. 1003 (1992)



Massachusetts

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Andy: In the climate liability context, there is an interesting parenthetical phrase in Lucas that could be very important. The Court stated: "The fact that a particular use has long been engaged in by similarly situated owners ordinarily imports a lack of any common law prohibition (**though changed circumstances or new knowledge may make what was previously permissible no longer so**)..." In other words, you may have many preexisting houses on a barrier beach and yet prevent expansion or new construction based on the "new knowledge," including that provided in this module. Just make sure that your decision cites the specific new evidence.

Photo credits: Friends of Sengekontacket

New construction denied on Cape Cod

Roberta Gove v. Zoning Board Of Appeals of Chatham, 444 Mass. 754 (2005)

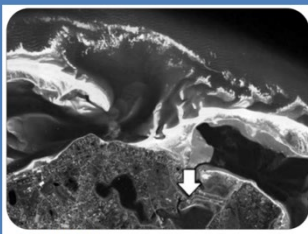


Photo: Google Earth

Approximate location of proposed home



FEMA A-Zone; Town Coastal Conservancy Zone

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Andy: This happened in the Town of Chatham on Cape Cod, when they refused to permit the construction of a new home in a flood zone because the local zoning bylaw prohibited new residential units in the town's mapped floodplains. This coastal regulatory takings case built upon previous case law, specifically Roberta Gove v. Zoning Board Of Appeals of Chatham in 2005, decided by Massachusetts' highest court.

Photo credits: [MA Stormsmart Coasts, Fact Sheet 3](#). Right: [Town of Chatham, MA Flood Maps online](#)

Why the Town won their case

- The goal of protecting people and property is **clearly articulated** in zoning bylaw
- While the construction of new homes is prohibited, there are many **alternative uses** for property owners
- The law was **fair and applied** to a mapped area



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Andy: The town of Chatham prevailed in this case for several reasons that are applicable to Rhode Island and Connecticut municipalities. First and foremost, the goal of safeguarding people and property was clearly articulated in the zoning bylaw. Additionally, while the construction of new homes was prohibited, there were many alternative uses so that the property owners weren't denied "all" beneficial use of the land. The court also found that the law was fair and applied to an area that was mapped in the town's regulations. As a board member, you can help property owners identify permissible alternate economic uses for a property in a floodplain.

Photo credits: Top and Bottom: J. Barrett

Why the Town won their case

- Local emergency managers testified that evacuation would put rescue workers at risk
- The Town was willing to legally defend its position



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Andy: Additionally, local emergency managers were willing to testify that evacuation efforts would put rescue workers at risk. Finally, the town was willing to defend its position in court. Make sure that your municipal leaders and solicitor are committed, not just because of a concern with environmental damage, but because of the greater future liability, both financial and physical, that may come from approving a project in an unsuitable location.

Photo credits: Zachary West, 100th MPAD

Here's the bottom line

- Use the **best available, vetted** information
- Ensure that your ordinances and regulations have **clear connections** to public health, safety, and welfare
- When making a final decision, be **specific in your conditions** and in reflecting resilience concerns
- Treat similar properties similarly

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Andy: So, in summary, in your role as a visionary, legislator and decision-maker, use the best available vetted information on flooding and other climate impacts in your decisions, regulations, and plans. Build a solid fact base to justify the plans and regulations you adopt. Show a commitment to flood mitigation and resilience planning by making progress toward the goals outlined in the Comprehensive Plan and the Hazard Mitigation Plan. Review your zoning ordinances and subdivision regulations through the lens of flooding and other climate impacts to ensure clear connections to public health, safety and welfare. Strong rules and regulations will reduce liability, including that related to takings and administrative appeals. While decisions will be difficult, they'll lead to more sound and defensible decisions in the long run. When your board is making a final decision on a proposal, be as specific as possible with the required conditions and ensure that they support resilience. And treat similar properties similarly to avoid takings claims.

What else can you do?

- Consult with your Municipal Solicitor on specific issues before the hearing and decision
- Stay up to date with the latest science and policy
- Talk to your peers about success stories and lessons learned in other communities

Souza v. Zoning Board of Review of Warren, 104 R.I. 697, 248 A.2d 325, 327 (1968)

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Andy: So, what else can you do? You can consult with your Municipal Solicitor on specific issues. Have him or her draft the board's decisions, especially when denying a use of property. The RI Supreme Court encourages this, stating in 1968 that "it might be appropriate to suggest again that... [local] boards should avail themselves of the legal service of their municipal legal departments." You can stay up to date with the latest science and policy and you can talk to your peers about success stories and lessons learned in other communities. Now I'm going to hand it back over to Juliana to finish up.

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PREP-RI: <https://prep-ri.org/>

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Adapt CT

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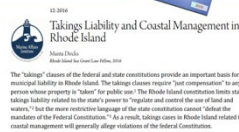
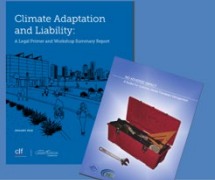
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Juliana: Thank you for viewing this module. Please visit the PREP-RI and Adapt CT websites to check out the resources document and presentation notes, to fill out the brief evaluation and get your certificate, and to view the other modules.

Resources

- RI Sea Grant Legal Program
- American Planning Association
- Association for State Floodplain Managers
- No Adverse Impact Toolkit (ASFPM)
- Conservation Law Foundation Climate Adaptation and Liability
- And many more...



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Juliana: Also check out resources from organizations such as the RI Sea Grant Legal Program, the American Planning Association, flood mitigation associations, and many others for more information on this topic.

Acknowledgements

Advisors

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A partnership of the Connecticut and Rhode Island Sea Grant programs; URI Coastal Resources Center; and the Narragansett Bay National Estuarine Research Reserve.

From left to right: Pam Rubinoff, Jen West, & Juliana Barrett



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Juliana: And thanks to the PREP-RI and Adapt CT Teams for pulling this module together!