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Read Porter

Senior Staff Attorney, Marine Affairs Institute, Roger Williams University School of Law

James Philopena Jr.

Rhode Island Sea Grant Law Fellow and J.D. Candidate, Roger Williams University School of Law, 2020

Cory Lee

Rhode Island Sea Grant Law Fellow and J.D. Candidate, 2021

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Climate Change and Dam Owner Liability in Rhode Island

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This guide is a product of the Marine Affairs Institute at Roger Williams University School of Law and the Rhode Island Sea Grant Legal Program. The authors of this report are Read Porter, Senior Staff Attorney, James Philopena, Jr., Rhode Island Sea Grant Law Fellow, and Cory Lee, Rhode Island Sea Grant Law Fellow. All errors and omissions are the responsibility of the Marine Affairs Institute. This study is provided only for informational and educational purposes and is not legal advice.

Increasing precipitation associated with climate change is affecting dam operation and hazards in Rhode Island. Flooding caused by increased precipitation or extreme weather events can cause dam failure or upstream or downstream flooding, resulting in loss of life and property. These losses can result in liability, which may vary based on the dam owner and its purpose. This study assists dam owners and the public in understanding the potential liabilities that may arise as a result of flooding from extreme weather events. Section one provides a background of dam hazards in Rhode Island in the context of climate change. Section two introduces the statutory, common law, and constitutional claims that may be brought against a dam owner after a flood. Section three applies these potential liabilities to illustrate how they may apply to different types of dams and dam owners. Section four evaluates Rhode Island law in the context of state laws from the northeast region, focusing on the application of statutory liability, strict liability and negligence standards, and liability for drawdown. Finally, the study concludes in section 5.

1 Background

Changing precipitation patterns are affecting the safety and operation of dams in Rhode Island. Average annual precipitation today is eight inches greater than 1930 levels and is projected to continue increasing by about an inch per decade.¹ Individual storms have also grown more severe over the past fifty years.² More precipitation and more severe storms pose challenges for dam owners in Rhode Island.

Extreme weather events can cause dams to fail. Dams are engineered to accommodate a specific design flood.³ Extreme weather events that exceed the design flood can cause dams to fail through

¹ E-mail from Elizabeth Stone, R.I. Dep't Env'tl. Mgmt., to author (Apr. 17, 2019).

² NARRAGANSETT BAY ESTUARY PROGRAM, STATE OF NARRAGANSETT BAY AND ITS WATERSHED: TECHNICAL REPORT 62 (2017).

³ Fed. Emergency Mgmt. Agency, FEMA P-94, [Selecting and Accommodating Inflow Design Floods for Dams](#) (2013); *Lesson Learned: High and Significant Hazard Dams Should be Designed to Pass an Appropriate Design Flood*, ASS'N OF STATE DAM SAFETY OFFICIALS, <https://damfailures.org/lessons-learned/high-and-significant-hazard-dams-should-be-design-to-pass-an-appropriate-design-flood-dams-constructed-prior-to-the-availability-of-extreme-rainfall-data-should-be-assessed-to-make-sure-they-have-ad/>.

overtopping or other causes, such as increased water pressure.⁴ According to the Association of State Dam Safety Officials, hydrologic and flooding conditions were by far the most common cause of dam failure between 2010 and 2017.⁵ When dams are not maintained adequately or are undersized for the increasing precipitation, the risk of failure is greater. Thus, increasing precipitation and severe precipitation may increase the risk of dam failure by exceeding predicted maximum precipitation used in dam design or by increasing the stresses on an aging or poorly-maintained structure.

Rhode Island classifies dams according to the hazards that they pose to life and property should they fail. The Rhode Island Department of Environmental Management (RIDEM) regulates dam operation and maintenance through the Dam Safety program within the Office of Compliance and Inspection (OCI).⁶ As discussed below, OCI is required to regularly inspect dams and classify them as high, significant, or low hazard based on the probable impacts of dam failure.⁷ A high hazard dam would result in the probable loss of human life, while significant hazard dams would cause major economic loss but not loss of life, and low hazard dams would result in no probable loss to life and low economic loss.⁸ More than a quarter of Rhode Island's dams present meaningful risk of death or substantial property losses. Of the 668 dams in the state of Rhode Island in 2018, 96 are high-hazard dams and 82 are significant-hazard dams.⁹ These impacts to life and property may result in liability for dam owners.

Increased precipitation can cause upstream and downstream flooding even without dam failure. Precipitation may increase the amount of water held behind a dam, causing flooding of upstream property.¹⁰ Similarly, extreme weather events may require dam owners to release water from a dam intentionally via primary and secondary/auxiliary spillways to relieve pressure on the dam structure, which can inundate property downstream, including to properties not located in a flood plain.¹¹ For example, impoundment of water by the Addicks and Barker Dams during Tropical Storm Harvey flooded properties above the dams, and intentional releases from those reservoirs to relieve pressure on the dams flooded downstream properties (Figure 1).¹² Both upstream and downstream flooding can cause substantial damage to life or property even if dams work as designed.

⁴ ASS'N OF STATE DAM SAFETY OFFICIALS, [LIVING WITH DAMS: EXTREME RAINFALL EVENTS CAN AND DO CAUSE DAM FAILURES](#) 12-15 (2015) (discussing causes of dam failure associated with extreme weather events).

⁵ *Dam Failures and Incidents*, ASS'N OF STATE DAM SAFETY OFFICIALS (2019), <https://perma.cc/4GST-3ZU>.

⁶ R.I. GEN. LAWS §§ 46-19-1.

⁷ 250 R.I. CODE R. §§ 130-05-1.9, 1.11.

⁸ 250 R.I. CODE R. § 130-05-1.5.

⁹ R.I. DEP'T OF ENVTL. MGMT., OFFICE OF COMPLIANCE AND INSPECTION, [ANNUAL REPORT TO THE GOVERNOR ON THE ACTIVITIES OF THE DAM SAFETY PROGRAM](#) 7 (2018).

¹⁰ See *In re Upstream Addicks and Barker (Texas) Flood-Control Reservoirs*, 138 Fed. Cl. 658 (Fed. Cl. 2018) (detailing flooding upstream of the Addicks and Barker dams as a consequence of Tropical Storm Harvey).

¹¹ ASS'N OF STATE DAM SAFETY OFFICIALS, *supra* note 4, at 8.

¹² *In re Upstream Addicks and Barker (Texas) Flood-Control Reservoirs*, 138 Fed. Cl. 658 (Fed. Cl. 2018); *Controlled Releases on Addicks and Barker Reservoir Increase Flooding Threat Along Buffalo Bayou*, HARRIS COUNTY FLOOD CONTROL DIST. (August 29, 2017 10:45:07 PM CST), <https://www.hcfc.org/press-room/current-news/2017/08/controlled-releases-on-addicks-and-barker-reservoir-increase-flooding-threat-along-buffalo-bayou/>.

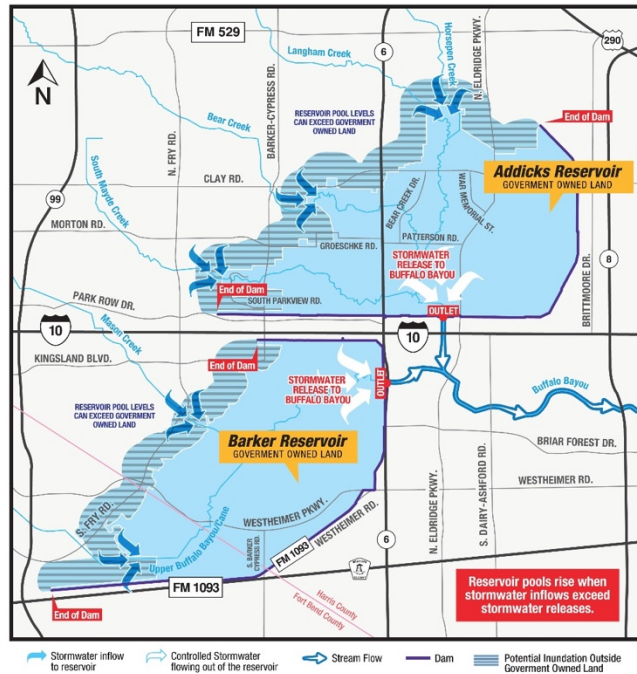


Figure 1. Addicks and Barker Dam flooding during Tropical Storm Harvey.¹³

2 Available Claims for Dam Flooding in Rhode Island

Damage to life and property as a result of dam failure or flooding may result in multiple sources of legal liability to dam owners. These liabilities may differ based on dam ownership and purpose. State and local governments, quasi-government corporations, and private individuals or corporations¹⁴ all own dams in Rhode Island but are not subject to the same liabilities. Similarly, public drinking water supply, storm water detention, recreation, and hydropower dams are subject to different laws.¹⁵ This section considers the potential liabilities associated with multiple types of dams in Rhode Island.

Dam owners may be liable under three types of claims. Statutory claims are based on Rhode Island laws and regulations, which impose strict liability upon dam owners for damage caused by impounded waters. Common law claims based on tort theories of strict liability, negligence, nuisance, conversion, and trespass also may apply. Last, plaintiffs can allege constitutional takings claims against governmental or quasi-governmental dam owners where the inundation of dam water effectuates a taking of private property.

¹³ HARRIS COUNTY FLOOD CONTROL DIST., *supra* note 12.

¹⁴ *Id.* at 9-12.

¹⁵ Tim Faulkner, *Floodgate Being Considered for Scituate Reservoir*, ECORI (November 29, 2016), <https://www.ecori.org/smart-growth/2016/11/28/floodgate-considered-for-scituate-reservoir>; TOWN OF BRISTOL, *NATURAL HAZARD MITIGATION PLAN* 40 (2016); *Dam Maintenance & Safety*, CITIZENS FOR THE PRESERVATION OF WATERMAN LAKE (Apr. 22, 2019), <http://www.cpw.org/main.php?P=damsafety>; *Learn About Hydropower*, RHODE ISLAND OFFICE OF ENERGY RESOURCES, [HTTP://WWW.ENERGY.RI.GOV/RENEWABLE-ENERGY/HYDRO/LEARN-ABOUT-HYDRO.PHP](http://www.energy.ri.gov/renewable-energy/hydro/learn-about-hydro.php).

2.1 Statutory and Regulatory Liability

Rhode Island statutes and regulations include language related to dam owner and precedent owner liability for flooding. This section reviews liabilities arising from the Mill Dam Act and from regulations issued by RIDEM

and administered by OCI. Rhode Island law provides other statutory liabilities related to dams, but these provisions are not reviewed in detail here because they do not appear to be directly related to dam integrity or management. For example, any violation of a public drinking water supply statute, regulation, or permit “shall constitute a public nuisance.”¹⁶ Any new or substantial alteration of an existing water storage facility requires approval by the Department of Health.¹⁷ However, this approval is primarily intended to ensure the safety of water for consumption rather than to address water levels or other operational considerations. As a result, this and similar provisions are not addressed below, although they could affect dam owner liabilities if permit conditions affect dam management.

2.1.1 The Mill Dam Act

The Rhode Island Mill Dam Act, also known as the Mill Act or Flowage Act, authorizes the operation of mill dams in Rhode Island.¹⁸ The Act, first passed in 1734,¹⁹ enabled the creation of mills by allowing dams to be created without the fear of injunction, so long as the mill owner pays compensation for damages that result from the dam.²⁰ The Mill Dam Act allows any person to recover for damages caused by a mill dam from a mill dam’s owner without showing fault or negligence. Specifically, any person may file a suit for damages when:

aggrieved or injured by the following of the pond raised by the dam, or by the stopping or raising of the water either above or below the dam, or by the backing of water under his or her land, or by the flowing out of any fall of water in his or her land by means of the dam.²¹

The Act applies strict liability because plaintiffs do not have to prove the dam owner was negligent or willful in the maintenance or operation of the dam.²² Instead, an injured party need only show an injury caused by the dam’s waters.²³ The Act holds both current and precedent owners liable for damages, and it specifically references damages to both upstream and downstream properties.²⁴ Additionally, the Rhode Island Supreme Court held in *Ronci Mfg. Co. v. State* that the government is

¹⁶ R.I. GEN. LAWS §§ 46-13-15.

¹⁷ 216 R.I. CODE R. § 50-05-1.5.

¹⁸ R.I. GEN. LAWS §§ 46-18-1 – 46-18-16.

¹⁹ *Mowry v. Sheldon*, 2 R.I. 369, 372 (R.I. 1852).

²⁰ *Slatersville Finishing Co. v. Greene*, 101 A. 226, 228 (R.I. 1917).

²¹ R.I. GEN. LAWS § 46-18-2.

²² *Id.*

²³ *White v. Woonasquatucket Reservoir Co.*, 103 A. 795, 796 (R.I. 1918).

²⁴ R.I. GEN. LAWS § 46-18-2.

subject to the mandates of the Mill Dam Act.²⁵ Therefore, liability under the Act does not vary between, government, quasi-government and private dam owners.

While it appears to provide broad liability, the applicability of the Act is likely limited. As written and interpreted, it refers only to mill dams – those raised “for the purpose of forming a pond to supply water to any mill or mills upon the stream whereon the dam is located.”²⁶ In 1852, the Rhode Island Supreme Court held that it applies solely to dams raised with the intention of powering a mill and that dams raised for other purposes, such as irrigation, are not subject to the Act’s protections or, presumably, its liability provisions.²⁷ Further, dams that once powered a mill but have been abandoned for that purpose may no longer be protected by or subject to the Act.²⁸ As a result, the Act likely will not apply to dams erected for purposes other than hydropower or to historic mill dams that are now used for non-mill purposes (e.g., storm water detention or recreation). Second, the Act may not be applicable to flooding caused by dam failure or severe storms. As discussed in section 4.1, courts in other states have limited liability under similar laws to compensation at the initial raising of the dam. In these states, plaintiffs must resolve damages claims from failure or storm flooding solely through common law claims. Rhode Island courts have not considered the application of the Mill Dam Act in a similar factual scenario to date.

2.1.2 Dam Inspection

As is the case in other states, Rhode Island statutes provide for dam inspection, classification, and enforcement. OCI is the primary agency responsible for administering the state statute authorizing dam inspection and enforcement.²⁹ The statute directs OCI to inspect and report on the condition of every dam in the state, requires owners to furnish OCI with descriptions of and other information about their dams, and prohibits dam construction or substantial alteration without prior OCI approval.³⁰ OCI is also empowered to investigate dams that may be unsafe and order and enforce corrective actions.³¹ The statute authorizes judicial enforcement of corrective orders, but does not authorize financial penalties or other liabilities for noncompliance.

In addition to authorizing inspections, the statute also provides for emergency planning. It directs each city or town to create an emergency action plan (EAP) for each significant or high hazard dam in its jurisdiction, at the dam owner’s expense.³² The EAPs are to follow guidelines created by the Rhode Island Emergency Management Agency (RIEMA).³³ EAPs identify property and

²⁵ 403 A.2d 1094, 1098 (R.I. 1979).

²⁶ R.I. GEN. LAWS § 46-18-1.

²⁷ *Mowry v. Sheldon*, 2 R.I. 369, 373 (R.I. 1852) (“It is only the application, actual or intended, of the dam to mill purposes that exempts it from the operation of the mill law.”); *Howe v. Norman*, 13 R.I. 488 (R.I. 1882) (enjoining drinking water dam and declining to apply Mill Dam Act).

²⁸ *Mowry v. Sheldon*, 2 R.I. 369, 376 (R.I. 1852).

²⁹ R.I. GEN. LAWS §§ 46-19-1 – 46-19-9.

³⁰ *Id.* §§ 46-19-1 – 46-19-3.

³¹ *Id.* §§ 46-19-4 – 46-19-8.

³² R.I. GEN. LAWS § 46-19-9.

³³ *Id.*, RIEMA, [DAM EMERGENCY ACTION PLAN \(EAP\) TEMPLATE](#) (2016).

infrastructure likely affected by a dam failure and coordinate emergency response efforts to mitigate damage following a dam failure.³⁴

RIDEM has issued dam safety regulations to implement the statute.³⁵ Among other provisions, for example, the regulations provide for prohibitions, dam classification system, dam registration, approval requirements for maintenance and repair, and inspections.³⁶ The regulations also include provisions relating to liability. First, they echo language in the Mill Dam Act that:

All current or precedent owners are responsible for liability for damage to property of others or injury to persons, including but not limited to loss of life, resulting by the following of the pond raised by the dam, by the stopping or raising of the water either above or below the dam, by the backing of water or by the flowing out of any fall of water by means of the dam.³⁷

Unlike the Mill Dam Act, this statement of liability is not limited strictly to mill dams. Rather, its language extends liability to all dams and all owners, regardless of purpose.³⁸ However, this provision appears to be unenforceable, as none of the Mill Dam Act, dam inspection statute, or any other current statute authorizes RIDEM to create this liability.³⁹ As a result, this provision appears to be unenforceable as a source of liability for landowners should a dam fail or cause a flood through other means.

The regulations do provide one additional source of liability through assessment of administrative penalties. As authorized by statute, RIDEM can issue enforcement notices, orders, and administrative penalties to ensure compliance with the regulations.⁴⁰ These penalties are available only to RIDEM and cannot be used to collect damages after dam-related failure or flooding.

2.2 Common Law Liability

Dam owners may be liable under the common law of tort in addition to under explicit statutes. Tort law allows parties to recover damages to compensate them for injuries caused by another.⁴¹ This section begins by introducing principles of government liability in tort cases, an issue that applies to

³⁴ R.I. EMERGENCY MGMT. AGENCY, [DAM EMERGENCY ACTION PLANS: A FUNCTIONAL GUIDE TO EAPS](#).

³⁵ 250 R.I. CODE R. pt. 130-05-1.

³⁶ 250 R.I. CODE R. §§ 130-05-1.7 - 1.11.

³⁷ *Id.* § 1.6(B).

³⁸ *Id.* § 1.6(C) (“These regulations shall not be interpreted as relieving any owner or person maintaining or having control of a dam from responsibility.”).

³⁹ The dam safety regulations cite several statutory chapters as authority. 250 R.I. CODE R. § 130-05-1.2. These include chapters establishing and establishing the powers of RIDEM, R.I. GEN. LAWS ch. 42-17.1, providing for administrative penalties for environmental violations, *id.* ch. 42-17.6, and the dam inspection statute itself. *Id.* ch. 46-19. None of these sources of authority creates enforceable liability for violations with the exception of authorization to assess administrative penalties of up to \$1000 for failure to comply with any regulation. *Id.* §§ 42-17.6-1 (maximum administrative penalty), 42-17.6-2 (authority to assess penalties). *See also id.* § 42-17.1-2(22) (authorizing department to impose administrative penalties as authorized in chapter 17.6).

⁴⁰ 250 R.I. CODE R. §§ 130-05-1.14.

⁴¹ 1 AMERICAN LAW OF TORTS § 1:2 (2019).

all types of tort claims. With that introduction, it then reviews common law claims that may apply to dam owners. It then considers regional laws to illustrate whether and how Rhode Island liability is consistent with regional trends.

2.2.1 Government Dam Owners and Tort Liability

Rhode Island law protects governmental entities against tort liability in some cases. Historically, governments and quasi-government entities have been protected from tort lawsuits by the principle of sovereign immunity.⁴² Rhode Island has waived its sovereign immunity against tort claims by statute, provided that certain conditions are met.⁴³ As a result, state, local, and quasi-governmental dam owners may be liable for tort claims.⁴⁴ However, the “public-duty doctrine” continues to shield these entities from “tort liability arising out of discretionary governmental actions that by their nature are not ordinarily performed by private persons.”⁴⁵

The purpose of a dam may determine whether its owner is shielded by the public-duty doctrine. While relevant cases are limited, some forms of dams are ordinarily operated by private entities, such that government entities operating these types of dams may be fully liable in tort law.⁴⁶ Courts hearing such cases could hypothetically distinguish between dams operated for purposes related to the public safety and welfare (e.g., stormwater detention, public recreation, or abandoned dams) and those operated for a return (e.g. water supply, hydropower). This distinction would accord with a Rhode Island Supreme Court decision holding that “supplying water for sale” to a public works contractor is a proprietary function.⁴⁷ Under this reasoning, governments operating water supply or hydropower dams may face greater liabilities than those operating dams for stormwater retention or other “discretionary” purposes.

While acting as a shield against liability, the public-duty doctrine is limited in several ways. Governments remain liable for damages: (i) when the governmental entity owes a “special duty” to the plaintiff; and (ii) for egregious conduct.⁴⁸ Damages in these instances are limited to \$100,000, whereas damages for proprietary conduct are unlimited.⁴⁹ While dam operators are unlikely to have a

⁴² 2 AMERICAN LAW OF TORTS § 6:16

⁴³ R.I. GEN. LAWS § 9-31-1.

⁴⁴ *Id.* (extending liability to “[t]he state of Rhode Island and any political subdivision thereof, including all cities and towns”); *see also id.* § 9-31-3 (specifically referring to fire districts).

⁴⁵ *Morales v. Town of Johnston*, 895 A.2d 721, 730 (R.I. 2006). *See also* *Roach v. State*, 157 A.3d 1042, 1049-51 (R.I. 2017) (explaining history and development of sovereign immunity, waiver, and public-duty doctrine in Rhode Island).

⁴⁶ *See* *Verity v. Danti*, 585 A.2d 65, 66-67 (R.I. 1991) (“[I]f an action is determined to be one that a private individual would engage in, the state's immunity is abrogated and the plaintiff's claim is not barred.”).

⁴⁷ *Karczmarczyk v. Quinn*, 200 A.2d 461 (R.I. 1970).

⁴⁸ *Kuzniar v. Keach*, 709 A.2d 1050, 1053 (R.I. 1998).

⁴⁹ R.I. GEN. LAWS §§ 9-31-2 (state liability); 9-31-3 (municipal and fire district liability). The legislature may authorize damages in greater amounts. *Id.* § 9-31-4.

“special duty” to specific property owners,⁵⁰ government dam owners could be liable under either the egregious conduct exception.

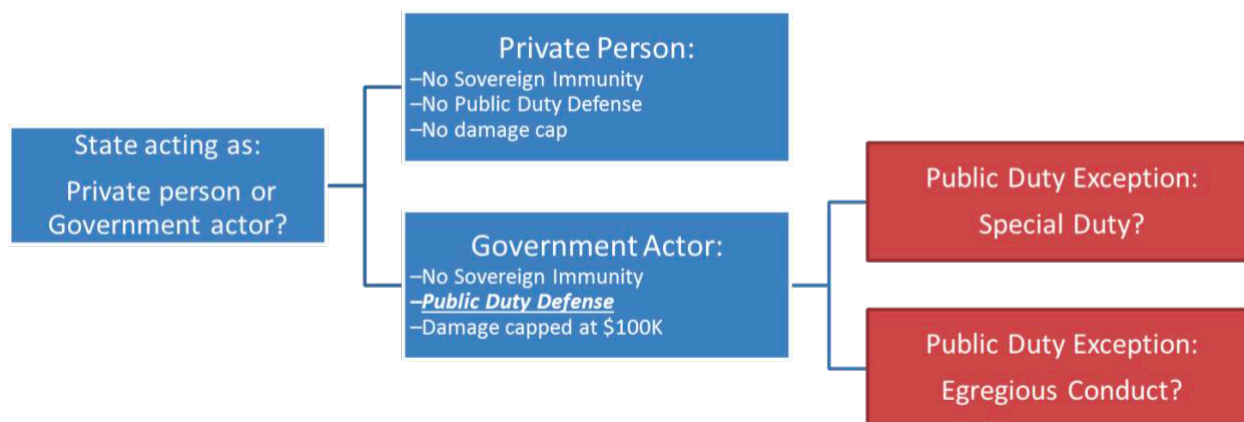


Figure 2. Structure of Rhode Island government tort liability doctrine.

Government dam owners may be liable for egregious conduct if they are aware that a dam is or may be unsafe and fails to address the hazard. The egregious conduct exception applies “when the state has knowledge that it has created a circumstance that forces an individual into a position of peril and subsequently chooses not to remedy the situation.”⁵¹ To prevail on an egregious-conduct claim, the plaintiff must show that the government entity created “circumstances that forced a reasonably prudent person into a position of extreme peril,” had “actual or constructive knowledge of the perilous circumstances,” and failed to address the dangerous condition within a reasonable amount of time.”⁵²

While no egregious conduct cases related to dams have been decided to date in Rhode Island, the 2017 Oroville Dam disaster provides a pertinent example of a dam near-failure that was preceded by knowledge of the hazard. According to news reports, environmental groups had previously challenged the dam’s federal relicensing due to the risk of spillway failure, but California (the dam owner) asserted that spillway upgrades were unnecessary as the dam was designed consistent with the probable maximum flood.⁵³ As predicted, the spillway eroded catastrophically when placed in use, resulting in the evacuation of 185,000 people.⁵⁴ Like many potential egregious-conduct cases,

⁵⁰ See *Quality Court Condominium Ass’n v. Quality Hill Dev. Corp.*, 641 A.2d 746, 750 (R.I. 1994) (“In cases in which this court has acknowledged the existence of a special duty, the plaintiffs have had some form of prior contact with state or municipal officials ‘who then knowingly embarked on a course of conduct that endangered the plaintiffs, or they have otherwise specifically come within the knowledge of the officials so that the injury to that particularly identified plaintiff can be or should have been foreseen.’”) (quoting *Knudsen v. Hall*, 490 A.2d 976, 978 (R.I. 1985)). It is possible, though perhaps unlikely, that a landowner could establish a special duty based on contacts between the injured landowner and the dam operator.

⁵¹ *Verity v. Danti*, 585 A.2d 65, 67 (R.I. 1991).

⁵² *Haley v. Town of Lincoln*, 611 A.2d 845, 849 (R.I. 1992).

⁵³ Paul Rogers, [Oroville Dam: Feds and State Officials Ignored Warnings 12 Years Ago](#), THE MERCURY NEWS, Feb. 12, 2017.

⁵⁴ *Id.*

this situation would raise issues of fact and law that would need to be decided in court.⁵⁵ However, similar foreknowledge of potential risks—as revealed by OCI dam inspections or other means—could expose government dam owners to liability if they do not adequately carry out required maintenance or responsibilities to create EAPs for high and significant hazard dams.

2.2.2 Sources of Common Law Liability in Rhode Island

Plaintiffs may raise a variety of common law claims against dam owners after dam failure or flooding. This section reviews five types of tort claims to dam owners, including absolute liability, negligence, private nuisance, conversion, and trespass claims. One or more of these claims may apply to specific factual circumstances. However, there are few cases in Rhode Island specifically applying these claims to dam owners. As a result, the applicability of some claims to dam owners will be uncertain until additional cases are decided by the state courts.

2.2.2.1 *Strict Liability*

Abnormally dangerous activities are subject to strict liability in Rhode Island.⁵⁶ Strict liability is “liability irrespective of negligence.”⁵⁷ It applies “when a plaintiff’s injuries are proximately caused by some ultrahazardous or abnormally dangerous activity of the defendant.”⁵⁸ Therefore, strict liability will only be applied if a dam is deemed abnormally dangerous by a court.⁵⁹ Rhode Island determines whether an activity is ultrahazardous or abnormally dangerous by considering six factors set out in the Restatement (Second) of Torts:

- (a) existence of high degree of risk of some harm to the person, land or chattels of others;
- (b) likelihood that the harm that results from it will be great;
- (c) inability to eliminate the risk by the exercise of reasonable care;
- (d) extent to which the activity is not a matter of common usage;
- (e) inappropriateness of the activity to the place where it is carried on; and
- (f) extent to which its value to the community is outweighed by its dangerous attributes.⁶⁰

These factors are not essential in every case; rather, the weight and application of each factor varies based on the facts of a specific case.⁶¹ However, the Rhode Island Supreme Court has recognized that the potential harm must be serious, and “an activity is not abnormally dangerous if the risks

⁵⁵ *Tedesco v. Connors*, 871 A.2d 920, 924-25 (R.I. 2005) (holding that egregious conduct is mixed question of law and fact).

⁵⁶ *Splendorio v. Bilray Demolition Co.*, 682 A.2d 461, 465-66 (R.I. 1996).

⁵⁷ 3 RESTATEMENT (SECOND) OF TORTS § 519 (1977) (“The defendant is held liable although he has exercised the utmost care to prevent the harm to the plaintiff that has ensued.”); J.B. Glen, Annotation, *Liability for Overflow or Escape of Water from Reservoir, Ditch or Artificial Pond*, 169 A.L.R. 517 (1947).

⁵⁸ *Selwyn v. Ward*, 879 A.2d 882, 889 (R.I. 2005).

⁵⁹ 3 RESTATEMENT (SECOND) OF TORTS § 519 (1977) (“The liability arises out of the abnormal danger of the activity itself, and the risk that it creates, of harm to those in the vicinity.”)

⁶⁰ *Splendorio*, 682 A.2d at 466 (quoting 3 RESTATEMENT (SECOND) OF TORTS § 520 (1977)).

⁶¹ *Id.*

therefrom could be limited by the exercise of reasonable care.”⁶² If a dam meets these conditions, its owner could be liable for damages resulting from dam-related floods or failures regardless of whether the owner was negligent or exercised due care.

Rhode Island courts have never decided whether operation of a dam is an ultrahazardous or abnormally dangerous activity. However, “water collected in quantity in [an] unsuitable or dangerous place” is a recognized type of abnormally dangerous activity in other jurisdictions.⁶³ If faced with such a case, Rhode Island courts would assess the hazards—and the defendant’s ability to manage those hazards—along with the appropriateness of the dam for its location and its benefits to the community.⁶⁴ This determination could result in different outcomes for different dams. For example, public water supply dams might be more likely than privately held recreational dams to avoid strict liability based on their benefit to society. On the other hand, a dam located above a town center may be more likely to be ultrahazardous due to the catastrophic consequences of failure.⁶⁵ In all cases, however, a dam owner may defend against a finding of absolute liability by showing that risk could be limited by use of reasonable care.

While strict liability does not require the plaintiff to show that the dam owner was at fault, it nonetheless has relevant defenses. The “Act of God” defense is the most relevant, and protects against liability for extreme events, including catastrophic floods that are “plainly beyond the capacity of any one to anticipate.”⁶⁶ Rhode Island courts recognize the Act of God defense, including in the context of catastrophic storms.⁶⁷ However, the courts have not defined the doctrine as it relates to storm frequency, and our expanding ability to predict storm intensity and return periods may affect future cases. As a result, the determination of whether a storm event is an Act of God will be determined on a case-by-case basis.

Assumption of risk may be a second defense in strict liability cases for abnormally dangerous activities. Rhode Island courts have not ruled on the application of assumption of risk in strict

⁶² *Id.*; see also Selwyn, 879 A.2d at 890 (“abnormally dangerous activities are those that cannot be made safe by the use of due care”).

⁶³ 3 RESTATEMENT (SECOND) OF TORTS § 520 rpt. note (1977) (collecting cases).

⁶⁴ The Restatement speaks specifically to the risks of dams based on their locations. “There are some highly dangerous activities, that necessarily involve a risk of serious harm in spite of all possible care, that can be carried on only in a particular place. . . a dam impounding water in a stream can be situated only in the bed of the stream. If these activities are of sufficient value to the community . . . , they may not be regarded as abnormally dangerous when they are so located, since the only place where the activity can be carried on must necessarily be regarded as an appropriate one.” RESTATEMENT (SECOND) TORTS § 520 cmt. j (1977).

⁶⁵ See Denis Binder, [Legal Liability for Dam Failures](#) 27 (2002) (unpublished manuscript) (“the collection and storage of a large quantity of water on a hillside reservoir upstream from a residential community may well constitute an abnormally dangerous activity. The consequences of such a breach are likely to be catastrophic.”).

⁶⁶ *Golden v. Amory*, 109 N.E.2d 131, 133 (Mass. 1952).

⁶⁷ *Indus. Park Water Co. v. Nat’l Fire Ins. Co.*, 2005 WL 372298, at *6 (R.I. 2005); *Howard v. Union R. Co.*, 57 A. 867, 868-69 (R.I. 1904); see also *Uniroyal, Inc. v. Hood*, 588 F.2d 454, 460 (5th Cir. 1979) (“[A]n act of God is an accident caused by physical causes which are irresistible or inevitable, such as lightning, storms, perils of the sea, earthquakes and inundations”).

liability cases, but the defense is accepted in a variety of other jurisdictions.⁶⁸ If accepted, this defense would likely have the same elements as under negligence (see *infra*), and thus would require actual knowledge and acceptance of an unreasonable risk of harm.⁶⁹ The defense would not be available against downstream property owners who predated a dam,⁷⁰ but could apply against subsequent purchasers of flood-prone properties. As a result, the assumption of risk defense may be available where a dam owner can show that a property owner purchased their property in full knowledge of its unreasonable risk of flooding.

2.2.2.2 Negligence

A dam owner may be liable for negligence resulting in downstream or upstream flooding.⁷¹ Plaintiffs in negligence cases must satisfy several elements to prove liability. Specifically, injured parties must show that the defendant: (i) owes them a legally-cognizable duty; (ii) breached that duty; and (iii) proximately caused an injury as a result of that breach.⁷² No Rhode Island court has adjudicated a negligence case against a dam owner to date, but most jurisdictions recognize negligence claims in such cases.⁷³ As a result, it is likely that a state court would recognize this tort, particularly in cases where strict liability or other forms of relief do not apply.

Courts that have considered negligence claims for dam-related flooding have found that dam owners have a legal duty to “exercise the care of an ordinarily prudent dam owner.”⁷⁴ The extent of a duty depends on the foreseeable risks of an activity.⁷⁵ In the case of dams, this duty is likely to be substantial, especially in significant or high hazard dams where the consequences of failure are severe.⁷⁶ Plaintiffs could show that the owner breached that duty by presenting a variety of evidence, such as failing to conduct routine maintenance or to manage a dam appropriately.⁷⁷ The evidence used to show a breach may vary, but could include, for example, failure to comply with an EAP or inspections showing maintenance failures.

⁶⁸ RESTATEMENT (SECOND) OF TORTS § 523 (1977).

⁶⁹ Kennedy v. Providence Hockey Club, Inc., 376 A.2d 329, 332 (R.I. 1977).

⁷⁰ RESTATEMENT (SECOND) TORTS § 523 cmt. f (1977) (“A possessor of land is not required to abandon the land and move away from it, merely because the defendant has set up a powder mill in such proximity to it that there is danger in the continued use of the land.”).

⁷¹ EDWARD A. THOMAS, ASS’N OF STATE FLOODPLAIN MANAGERS, [LIABILITY FOR WATER CONTROL STRUCTURE FAILURE DUE TO FLOODING](#) (2006).

⁷² Flynn v. Nickerson Community Center, 177 A.3d 468, 476 (R.I. 2018).

⁷³ J.B. Glen, Annotation, *Liability for Overflow or Escape of Water from Reservoir, Ditch or Artificial Pond*, 169 A.L.R. 517.

⁷⁴ Hoosac Tunnel & W. R. Co. v. New England Power Co., 42 N.E.2d 832, 835 (Mass. 1942).

⁷⁵ Splendorio v. Bilray Demolition Co., 682 A.2d 461, 466 (R.I. 1996) (“The linchpin in determining the existence of any duty owed . . . was the foreseeability of the risk of injury to them by [defendant’s] actions. ‘The risk reasonably to be perceived defines the duty to be obeyed, and risk imports relation; it is risk to another or to others *within the range of apprehension.*’” (citations omitted) (emphasis in original) (quoting Builders Specialty Co. v. Goulet, 639 A.2d 59, 60 (R.I. 1994))).

⁷⁶ THOMAS, *supra* note 71, at 10 (citing Ezra Ripley Thayer, *Liability Without Fault*, 29 HARV. L. REV. 801, 805 (1916)) (“[T]he duty of care in circumstances where life and limb were at stake is the highest possible”).

⁷⁷ See, e.g., Whipple v. Wanskuck Co., 12 R.I. 321 (R.I. 1879) (upholding negligence claim by dam owner against dam tenant for destruction of dam due to failure to open spillway); THOMAS, *supra* note 71, at 11-12 (discussing importance of dam inspection to show a breach of duty).

Plaintiffs must show that the defendant's actions proximately caused injuries in order to prevail in a negligence claim.⁷⁸ Causation may not be in dispute in many cases, including those involving dam failure. However, causation may be contested where a flood would have occurred regardless of whether the dam was present or where an upstream dam failure causes a cascade of downstream failures.⁷⁹ If the damages would have occurred without the dam present, the dam owner will not be liable for damages caused by flooding. Similarly, dam owners are not responsible for damages resulting from acts of God, as this defense applies to negligence claims in the same manner as to strict liability claims (see *supra*).⁸⁰

“Assumption of risk” may also prevent liability in negligence cases involving dam-related flooding. A defendant is not liable for negligence in cases where the plaintiff “knowingly accepts a dangerous situation.”⁸¹ To prevail, the defendant must “establish that plaintiff knew of the existence of a danger, appreciated its unreasonable character, and then voluntarily exposed himself to it.”⁸² A plaintiff must have actual knowledge of the risk and its unreasonableness in order to assume it.⁸³ In cases where actual knowledge is lacking but the plaintiff objectively should have known of the risk, they may be contributorily negligent.⁸⁴

2.2.2.3 Private Nuisance

Dam owners may be subject to private nuisance claims if their dams unreasonably and materially interfere with the use and enjoyment of neighboring properties.⁸⁵ Nuisance differs from negligence because “a nuisance claim is predicated upon an unreasonable injury rather than unreasonable conduct.”⁸⁶ As a result, a nuisance claim can succeed even if the defendant did not act in a negligent way.⁸⁷ To succeed on a private nuisance claim, an injured party must prove: (1) existence of a

⁷⁸ Flynn, 177 A.3d at 476.

⁷⁹ THOMAS, *supra* note 71, at 13-14; Beaton v. Conn. Light & Power, 3 A.2d 315, 319 (Conn. 1938) (“While the plaintiffs were entitled to the customary flow of the river and the defendant had no right to accelerate substantially the flow of the water beyond the natural capacity of its banks, yet you will bear in mind that the plaintiff has to prove that such acceleration or increase was caused by the defendant and caused the injuries claimed; and if the flood that caused the damages was created solely by storm and weather conditions and the conduct of the defendant as alleged did not contribute substantially or essentially to cause it, the defendant would not be liable.”).

⁸⁰ J.B. Glen, Annotation, *Liability for Overflow or Escape of Water from Reservoir, Ditch or Artificial Pond*, 169 A.L.R. 517; Beaton, 3 A.2d at 318.

⁸¹ Sheehan v. The N. Am. Mktg. Corp., 610 F.3d 144, 151 (1st Cir. 2010) (quoting Kennedy v. Providence Hockey Club, Inc., 376 A.2d 329, 333 (R.I. 1977)).

⁸² Drew v. Wall, 495 A.2d 229, 231 (R.I. 1985).

⁸³ Kennedy v. Providence Hockey Club, Inc., 376 A.2d 329, 332 (R.I. 1977).

⁸⁴ *Id.* at 332-33 (discussing distinction between assumption of risk and contributory negligence). Note that contributory negligence is not available to limit damages in strict liability cases. RESTATEMENT (SECOND) TORTS § 524 (1977).

⁸⁵ Citizens for Preservation of Waterman Lake v. Davis, 420 A.2d 53, 59 (R.I. 1980); Weida v. Ferry, 493 A.2d 824, 826 (R.I. 1985).

⁸⁶ Weida, 493 A.2d at 826.

⁸⁷ *Id.*

nuisance; and (2) injury caused by the nuisance.⁸⁸ The injury must be a material harm to an interest in property.⁸⁹

Rhode Island recognizes that flooding can be a nuisance.⁹⁰ As a result, it is possible that dam-related flooding could result in private nuisance claims. However, there are several reasons to doubt that private nuisance claims would be effective in the context of dam failure or floods associated with severe storms.

1. Rhode Island law limits nuisance claims to contemporaneous uses of *neighboring* property.⁹¹ Downstream or upstream flooding may not satisfy this requirement.
2. Private nuisance is intended to cover a continuous activity rather than a rare or intermittent one.⁹² Flooding is likely to be a single or rare event rather than a continuous one, and thus will not qualify as a nuisance in most cases.
3. Owners could argue that upstream or downstream owners in the floodplain “came to the nuisance” when they bought their property. The doctrine of “coming to the nuisance” protects existing activities (e.g., dams) against challenges by later-arriving landowners.⁹³ In Rhode Island, coming to a nuisance is “one factor that may be considered in determining” if a defendant’s activity is unreasonable and thus a nuisance.⁹⁴ In the context of dam-related flooding, dam owners could assert that plaintiffs purchased their property with known risk that it could be flooded.
4. Owners could argue that a storm is an Act of God.

Based on these defenses, private nuisance claims appear unlikely to succeed in the context of many dam flooding disputes.

In addition to flood claims, plaintiffs have used nuisance to challenge drawdown of impounded waters. In *Hood v. Slejkin*, the Rhode Island Supreme Court overturned an injunction requiring a dam owner to maintain the water level on Lebanon Pond at its historic level and seeking damages for

⁸⁸ *Citizens for Preservation of Waterman Lake*, 420 A.2d at 59.

⁸⁹ *Id.* (“The law does not attempt to impose liability in every case in which one person's conduct has some detrimental effect on another. Liability is imposed only in those cases in which the harm or risk to one is greater than he ought to be required to bear under the circumstances.”); *Iafrate v. Ramsden*, 190 A.2d 473, 476 (R.I. 1963).

⁹⁰ *Butler v. Bruno*, 341 A.2d 735, 740 n.6 (R.I. 1975) (“[T]he invasion of one's property by surface waters can be a nuisance, no different from an invasion by noise, noxious vapors, or the like.”).

⁹¹ *Hydro-Manufacturing*, 640 A.2d at 957 (quoting *Weida v. Ferry*, 493 A.2d 824, 826 (R.I. 1985)) (“[A] private nuisance ‘arises from the unreasonable use of one’s property that materially interfere with a *neighbor’s* physical comfort or the *neighbor’s* use of his real estate.’”).

⁹² *Hennessey v. Pyne*, 694 A.2d 691, 695 (R.I. 1997) (“[A]n isolated incident is not the type of conduct that nuisance law is intended to remedy.”).

⁹³ *Tuttle v. Church*, 53 F. 422, 426 (D.R.I. 1892) (“If one voluntarily moves into a town or neighborhood where smoke or noxious gases abound, it may be presumed that he does so for sufficient reasons, and he should not be permitted to come into a court of equity and restrain the prosecution of industries already established, and upon which the business interests and welfare of the community may depend.”).

⁹⁴ *Weida*, 493 A.2d at 827.

exposure of noxious sediments.⁹⁵ The court declined to find nuisance damages because the odors emanating from the exposed “muck” were caused by an upstream sewage disposal plant rather than by the dam owner.⁹⁶

2.2.2.4 Conversion

Dam owners may be liable to an injured party for the conversion of chattel. Conversion is “the intentional exercise of dominion or control” over the personal property of another that “so seriously interferes with the right of another to control it that the [defendant] may justly be required to pay the other the full value of the chattel.”⁹⁷ Conversion claims are limited strictly to tangible objects and do not include real property.⁹⁸ Dam owners thus could be held liable for damage to possessions in conversion claims, but not to loss of the use of land.

Conversion claims are likely to succeed against dam owners only in limited situations. To succeed on a conversion claim, an injured party must establish: (i) that they possessed the property; and (ii) that the defendant intentionally exercised control over the property without consent.⁹⁹ In many instances, including dam failure, it is unlikely that plaintiffs will be able to prove intent by a dam owner to control the property. However, a conversion claim may exist where a dam owner intentionally releases dam waters in the knowledge that they will inundate downstream properties. In addition, plaintiffs may also be able to show intent in cases where dam owners do not obtain upstream property that is likely to be flooded at times, as in the Addicks and Barker dam cases.

2.2.2.5 Trespass

Occupation of land by impounded waters behind a dam or flood waters released from a dam may constitute a trespass. Trespass is the intentional entry onto the property of another without consent.¹⁰⁰ Continuing trespass is defined as the “unprivileged remaining on land in another’s property.”¹⁰¹ Notably, trespass does not require the plaintiff to show injury associated with the trespass—mere entry is enough to recover.¹⁰² Recovery may take the form of money damages or, for continuing trespasses, an injunction.¹⁰³ Rhode Island courts have held that the invasion of water onto another’s property is a trespass.¹⁰⁴ Thus, while no Rhode Island court has adjudicated a trespass claim related to dam operations, future floods could include this claim in instances where dam

⁹⁵ 143 A.2d 683 (R.I. 1958).

⁹⁶ *Id.* at 687-88.

⁹⁷ *Montecalvo v. Mandarelli*, 682 A.2d 918, 928 (R.I. 1996); *see also Narragansett Elec. Co. v. Carbone*, 898 A.2d 87, 97 (R.I. 2006).

⁹⁸ *Montecalvo*, 682 A.2d at 928.

⁹⁹ *Id.*

¹⁰⁰ *Bennett v. Napolitano*, 746 A.2d 138, 141 (R.I. 2000).

¹⁰¹ *City of Providence v. Doe*, 21 A.3d 315 (R.I. 2011) (quoting *Mesollela v. City of Providence*, 508 A.2d 661, 668 n.8 (R.I. 1986)).

¹⁰² *Newstone Dev., LLC v. East Pacific, LLC*, 140 A.3d 100, 105-06 (R.I. 2016).

¹⁰³ *Id.*

¹⁰⁴ *Klowan v. Howard*, 113 A.2d 872, 874 (R.I. 1955); *Lombeau, Inc. v. Woerner*, 2005 WL 2476227, at *5 (R.I. Super. 2005).

owners cause flooding by detaining or releasing flood waters with the intent to flood upstream or downstream property.

2.3 Constitutional Liability

In addition to statutory and tort claims, government dam owners may be subject to constitutional liability if they violate the constitutional rights of a property owner whose land is flooded. This section reviews potential liabilities for violations of the takings clause and for civil rights violations.

2.3.1 Takings

Flooding due to government-controlled dam operations may constitute a taking in violation of the Fifth Amendment of the United States Constitution. The Fifth Amendment states that “private property [shall not] be taken for public use, without just compensation.”¹⁰⁵ Takings liability requires an invasion of private property that is “the direct, natural, or probable result of authorized government action.”¹⁰⁶ Thus, state and local governments and officials may be liable for their actions, though not for inaction or failure to act,¹⁰⁷ while private dam owners are not subject to takings liability at all.

Flooding as a result of government dam management actions may be a taking. The Supreme Court has held that upstream flooding resulting from dam construction is a form of physical occupation subject to liability,¹⁰⁸ as is seasonally-recurring flooding caused by dam operations.¹⁰⁹ On the other hand, the Court declined to find a taking for flooding after construction of a canal because the flooding was not foreseeable and the property owner did not show that the canal caused the flooding.¹¹⁰ In 2012, the Supreme Court decided *Arkansas Game and Fish Commission v. United States*, in which the Army Corps of Engineers intentionally deviated from its dam manual over several years, flooding a hardwood forest and resulting in the loss of valuable timber owned by the state.¹¹¹ The Court found that temporary flooding can be a taking and identified several factors to consider when determining if a flood event is a taking. These factors include: (1) duration of the flood, (2) the degree to which the flood was “intended or [] the foreseeable result of authorized” government action; and (3) severity of the interference with the use of property.¹¹² Under these precedents, takings cases associated with flooding from dams will be decided on a case-by-case basis. Intentional or foreseeable temporary flooding of private property caused by affirmative government actions may

¹⁰⁵ U.S. CONST. amend. V.

¹⁰⁶ *St. Bernard Parish Gov’t v. U.S.*, 887 F.3d 1354, 1360 (Fed. Cir. 2018).

¹⁰⁷ *Id.*

¹⁰⁸ *Pumpelly v. Green Bay Co.*, 80 U.S. 166, 181 (1872) (“where real estate is actually invaded by superinduced additions of water, earth, sand, or other material ... so as to effectually destroy or impair its usefulness, it is a taking, within the meaning of the Constitution.”).

¹⁰⁹ *U.S. v. Cress*, 243 U.S. 316 (1917).

¹¹⁰ *Sanguinetti v. U.S.*, 264 U.S. 146 (1924).

¹¹¹ 568 U.S. 23, 27-28 (2012).

¹¹² *Id.* at 38-39.

result in liability, particularly where those decisions result in severe impacts on affected property owners that would not have occurred but for the dam.

2.3.2 Section 1983

Governments may be liable under “section 1983” claims related to dam operations. Section 1983 is a federal statute that authorizes civil actions against the government for “deprivation of any rights, privileges, or immunities secured by the Constitution and laws.”¹¹³ To prevail on a section 1983 claim, the plaintiff must first show that government action violated a protected right and “was committed by a person acting under color of state law.”¹¹⁴ Deprivation of life and property are protected rights under the Constitution and may result in liability under section 1983.¹¹⁵ However, not any injury is severe enough to violate due process: the Supreme Court has “observed repeatedly that the Due Process Clause is not a substitute for traditional tort remedies.”¹¹⁶

Only those behaviors that “shock the conscience” result in violations of substantive due process and thus trigger liability under section 1983.¹¹⁷ Whether an action shocks the conscience depends on the circumstances. In most instances, negligent actions are not enough¹¹⁸—actions must be “egregious and outrageous” to shock the conscience.¹¹⁹ The courts have noted that context matters, however; in non-emergency situations “where actors have an opportunity to reflect and make reasoned and rational decisions,” deliberate indifference to the danger may suffice to shock the conscience.¹²⁰

Section 1983 liability applies to municipalities¹²¹ and municipal officials “acting under color of state law,”¹²² but does not apply to states or state officials.¹²³ To prevail against a municipality, a plaintiff must identify a municipal “policy” or “custom” that caused the plaintiff’s injury.¹²⁴ Liability against municipalities can arise if a policy or custom itself violates federal law, or if the municipality fails to train its employees.¹²⁵ Municipal officers are also subject to limited liability under section 1983. However, officers are protected by the doctrine of qualified immunity unless they are “plainly

¹¹³ 42 U.S.C. § 1983.

¹¹⁴ *West v. Atkins*, 487 U.S. 42, 48 (1988).

¹¹⁵ *Ramos-Pinero v. Puerto Rico*, 453 F.3d 48, 52 (1st Cir. 2006) (“The Due Process Clause of the Fourteenth Amendment forbids a state from depriving a person of life, liberty, or property without due process of law.”).

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 53.

¹¹⁸ *Id.* at 53 (citing *Cty. of Sacramento v. Lewis*, 523 U.S. 833, 849 (1998)).

¹¹⁹ *Melendez-Garcia v. Sanchez*, 629 F.3d 25, 37 (1st Cir. 2010) (internal quotation marks omitted).

¹²⁰ *Rivera v. Rhode Island*, 402 F.3d 27, 36 (1st Cir. 2005); *J.R. v. Gloria*, 593 F.3d 73, 80 (1st Cir. 2010).

¹²¹ *Haley v. City of Boston*, 657 F.3d 39, 51 (1st Cir. 2011) (requiring plaintiff to show that “through its *deliberate* conduct, the municipality was the ‘moving force’ behind the injury alleged.” (quoting *Bd. of Comm’rs of Bryan Cty. v. Brown*, 520 U.S. 397, 404 (1997) (emphasis in original))).

¹²² *West*, 487 U.S. at 49-50 (“[G]enerally, a public employee acts under color of state law while acting in his official capacity or while exercising his responsibilities pursuant to state law.”).

¹²³ *Will v. Mich. Dept. of State Police*, 491 U.S. 58, 68-71 (1989).

¹²⁴ *Haley*, 657 F.3d at 49-50.

¹²⁵ *Id.* at 51-52 (“Triggering municipal liability on a claim of failure to train requires a showing that municipal decisionmakers either knew or should have known that training was inadequate but nonetheless exhibited deliberate indifference to the unconstitutional effects of those inadequacies.”).

incompetent” or knowingly violate the plaintiff’s rights.¹²⁶ Based on these precedents, local governments, quasi-municipal entities such as fire districts, and municipal officers such as police or dam keepers could be liable in some instances if their actions result in flooding.

In limited circumstances, governments may be liable under section 1983 for the actions of a third party.¹²⁷ While the default rule is that governments are not liable for actions of private parties, “when the state creates the danger to an individual, an affirmative duty to protect might arise.”¹²⁸ Under federal law applicable in Rhode Island, “state-created danger” claims require plaintiffs to show that a government official took an affirmative action that was the proximate cause of the injury, as well as that the actions “shock the conscience.”¹²⁹ This standard is difficult for plaintiffs to satisfy, but plaintiffs have prevailed in some instances in non-emergency situations.¹³⁰

Section 1983 has been asserted against municipal and county governments and officials in one dam liability case to date. In *Van Orden v. Borough of Woodstown*, a borough in New Jersey opened a floodgate at the Veterans Memorial Lake Dam “to relieve pressure and control flood waters’ as Hurricane Irene approached.”¹³¹ The borough announced that it would open the floodgates but did not block the road in its path or take other steps to prevent drivers from using it.¹³² When it was opened, a driver was drowned.¹³³ The court initially declined to dismiss the case, finding that borough took affirmative action that could have foreseeably and directly caused the plaintiff’s death and could shock the conscience.¹³⁴ However, the court eventually issued a summary judgment for the defendants because the evidence did not support a finding that the government acted in a deliberately indifferent manner.¹³⁵ The development and use of an EAP and engineering analysis were important evidence supporting the court’s conclusion.¹³⁶ While not resulting in liability, this case suggests that the state-created danger doctrine could result in liability for governments in some scenarios.

Rhode Island municipalities and officers could be held liable under section 1983 for damage to life and property caused by dam-related flooding by their own actions or by creating danger caused by a private party. Rhode Island law requires municipalities to develop EAPs,¹³⁷ and local government entities may have additional policies or customs in operating their own dams or those owned by

¹²⁶ *Id.* at 47 (quoting *Mallet v. Briggs*, 475 U.S. 335, 341 (1986)).

¹²⁷ *DeShaney v. Winnebago Cty. Dept. of Soc. Servs.*, 489 U.S. 189 (1989).

¹²⁸ *Rivera v. Rhode Island*, 402 F.3d 27, 34-35 (1st Cir. 2005).

¹²⁹ *Id.* at 34-37.

¹³⁰ *Doe v. Town of Wayland*, 179 F.Supp.3d 155 (D. Mass. 2016).

¹³¹ 5 F.Supp.3d 676, 679 (D.N.J. 2014).

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.* at 681-84 (“Releasing “raging flood water” capable of enveloping roads and bridges and causing serious bodily injury or death, without taking safety measures to protect citizens, certainly could be considered conduct that shocks the conscience.”).

¹³⁵ *Van Orden v. Borough of Woodstown, NJ*, 2016 bWL 6662682 (D.N.J. 2016), *aff’d* 703 Fed. Appx. 153 (3d Cir. 2017).

¹³⁶ *Id.* at *9-*10.

¹³⁷ R.I. GEN. LAWS § 46-19-9.

private parties. Failure to create EAPs, use of policies or customs that foreseeably could result in deprivation of life or property (e.g., maintaining reservoir levels so high that the dam could foreseeably require opening emergency spillway in a storm), or failure to train employees on these policies or customs could all plausibly result in liability for direct actions by the municipality or its officers. On the other hand, developing and using EAPs can reduce the likelihood of liability should serious harm result from a dam management decision. This may be particularly true in emergency situations where towns or officers direct private parties to act in ways that result in injury. In such cases, courts are likely to require that the actions be truly egregious before finding liability. However, liability is not impossible even in these cases—for example, refusal to allow a dam owner to open a spillway, contrary to an EAP, that results in dam failure could be egregious conduct. Thus, the liability implications of section 1983 are likely to be decided on the facts of each particular case.

3 Analysis

Different dams and dam owners are subject to different types of liability in Rhode Island. This section discusses these differences and examines how management decisions, such as intentional release and floodplain development under dams, affect liability.

3.1 Liability by Dam Type

Dam type may determine liability under certain claims. While most forms of liability do not turn on the purpose of a dam (e.g., flood control, power, water supply), some forms of liability are affected. This section discusses instances where dam purpose affects liability, including: (1) liability under the Mill Dam Act; (2) liability as an abnormally dangerous activity; and (3) government damages exposure under tort law.

The Mill Dam Act does not apply to dams not used for power, and therefore may not result in liability for owners or operators of other types of dams, such as those used for water supply or stormwater detention. The language and subsequent application of the Mill Dam Act is predicated on the intended use of the dam to power a mill. While courts have rarely been called upon to determine the applicability of the Act in recent decades, prior precedents indicate that it does not apply to dams specifically raised for other purposes, such as irrigation. Moreover, dams that were previously used for mills but now are used for other purposes may not be covered by the Act. As a result, the Act's liability provisions do not appear to apply to dams raised and used for purposes such as water supply or recreation.

The purpose of a dam may affect its status as an abnormally dangerous activity under tort law. Application of absolute liability is based on the six factors identified in *Splendorio v. Bilray Demolition Co.*, including the “extent to which its value to the community is outweighed by its dangerous attributes.”¹³⁸ Dams differ in their value to the community; for example, a water supply dam may have critical value to the public, whereas a recreational, privately-operated hydropower dam, or

¹³⁸ *Splendorio v. Bilray Demolition Co.*, 682 A.2d 461, 466. (R.I. 1996) (quoting 3 RESTATEMENT (SECOND) TORTS § 520 (1977)).

derelict dam would have less or no value. While status as an abnormally dangerous activity depends on more than this one factor, dams serving community functions may be less likely to trigger absolute liability. In such cases, these dams would be subject to liability under other grounds, notably including negligence.

Finally, the purpose of a dam affects the damages available in tort claims against government defendants. Recovery for tort claims in these cases is capped at \$100,000 unless the government is engaging in “proprietary conduct,” which may include the sale of water or other activities that can be and are elsewhere carried out by private companies. Thus, the tort liability exposure of government-owned water supply or hydroelectric dams may be greater than of dams used for “non-proprietary” functions such as flood control or stormwater retention.

3.2 Liability by Owner Type

Application of liability is often dependent on the dam’s owner. In particular, government and private dam owners are subject to different liabilities under the Constitution and tort law.

Constitutional claims are only available against government entities. As a result, takings claims and section 1983 claims can be brought successfully against state, local, and quasi-governmental entities, but not against private entities. These claims thus are available in flooding cases related to government-owned or government-operated dams and may also be available where governments act affirmatively to direct actions by private dam owners, resulting in foreseeable injuries.

While they have heightened exposure based on constitutional claims, government dam owners are protected from tort liability in many cases by sovereign immunity. The public-duty doctrine protects government entities while exercising discretionary functions, which likely include operation of dams for purposes not performed by private entities. Government entities may still be liable in tort law if they have a special duty to a particular plaintiff or act in an egregious manner, but in such instances their damage exposure is limited to just \$100,000. Under these precedents, government entities may be protected from tort law, but these protections are limited and by no means guaranteed.

Unlike takings and tort claims, all dam owners are subject to the same statutory liability. The Rhode Island Supreme Court has held that the government is subject to the Mill Dam Act.¹³⁹ Additionally, RIDEM regulations do not distinguish among owners for application of liability.¹⁴⁰ Accordingly, statutory liability does not vary among government, quasi-government or private dam owners under the Mill Dam Act or the Dam Safety regulations.

3.3 Intentional Drawdowns Under Rhode Island Law

Dam owners may desire to draw down impoundment levels to mitigate the risk of dam failure or overtopping caused by intensifying precipitation. These drawdowns could occur on a short-term basis when specific storms are forecasted. Other dams that cannot rapidly alter levels may instead

¹³⁹ Ronci Mfg. Co. v. State, 403 A.2d 1094, 1098 (R.I. 1979).

¹⁴⁰ 250 R.I. CODE R. pt. 130-05-1.

consider seasonal drawdowns. Drawdowns by Rhode Island dam owners may trigger both approval requirements and potential liability, as described in this section.

Drawdowns in Rhode Island are subject to the Fresh Water Wetlands Act (Wetlands Act). The Act recognizes that dam impoundments create wetlands,¹⁴¹ and dam owners therefore must obtain approval from RIDEM before conducting activities that may alter those wetlands—including drawdowns.¹⁴² While not listed as an exemption in the regulations, RIDEM also does not require approval for “grandfathered” regular drawdowns that predate the Wetlands Act and continue today.¹⁴³ Other relevant exceptions to the approval requirement include:

- maintenance of municipal drinking water impoundments “within the boundary perimeters of the impoundment,” with notice to the Department;
- “[m]aintenance, repair and emergency repair of high hazard and significant hazard dams” that do not substantially alter the dam; and
- “limited maintenance” of low hazard dams and “[i]nspection, maintenance and repair to any water control structure” in them.¹⁴⁴

While a written application is generally required for approval of non-exempted activities,¹⁴⁵ RIDEM regulations also provide for oral approval of emergency alterations (e.g., on low hazard dams) provided that they do not result in a permanent alteration of the wetlands except as allowed for dam safety by the Department.¹⁴⁶ Thus, post-storm emergency repairs are possible without approval or with oral approval, but dam owners must file a complete application and obtain approval from the Department for both pre-storm and increased seasonal drawdowns. Approval and any associated conditions will require owners to avoid and mitigate harm to the wetlands, which could affect the usefulness of this strategy in the state.

Drawdowns can be challenged by neighboring landowners even if approved by RIDEM. As noted in section 2.2.2.3, one such case has been brought in Rhode Island to date. In *Hood v. Slefkin*, the state Supreme Court found that owners of lands bordering impounded waters do not obtain a property interest in those water levels, so the dam owner cannot be forced to maintain the lake at a particular level.¹⁴⁷ In addition, the dam owner was not required to compensate the abutters for nuisance damages caused by the exposure of noxious muck discharged from an upstream sewage plant.¹⁴⁸ As a result, the state appears unwilling to require dam owners to maintain particular lake

¹⁴¹ 250 R.I. CODE R. § 150-15-1.2.

¹⁴² R.I. GEN. LAWS § 2-1-21.

¹⁴³ E-mail from David Chopy, R.I. Dep’t Env’tl. Mgmt., to author (Oct. 9, 2019).

¹⁴⁴ *Id.*; 250 R.I. CODE R. § 150-15-1.6.

¹⁴⁵ 250 R.I. CODE R. § 150-15-1.10.

¹⁴⁶ 250 R.I. CODE R. § 150-15-1.11.

¹⁴⁷ 143 A.2d 683, 687 (R.I. 1958). (“Those owners of land which is overflowed by the erection of a dam, the owner of which has acquired the right by prescription to so continue to overflow their land, gain no reciprocal right to require that owner to maintain the dam or the water level of the pond formed thereby.”).

¹⁴⁸ *Id.*

levels in the abstract, so that state dam owners with RIDEM approval can generally conduct drawdowns without liability from abutting landowners.

Drawdowns affect not only lands abutting the impoundment, but also downstream properties, which may be flooded. Preemptive releases are likely to be liable for intentional torts such as trespass if they inundate downstream properties, and additional torts such as conversion, private nuisance, and negligence if they cause damage and meet the other elements required for each claim. Similarly, temporary inundations by government entities that result in harm may be takings, as in *Arkansas Game and Fish*.¹⁴⁹ Planning for releases in timing and amount of preemptive drawdowns may be needed to avoid flood damage and associated liability.

If preemptive releases do cause flood injuries, dam owners may have difficulty defending resulting claims because causation will be relatively easy for plaintiffs to prove. In preemptive release cases, the flooding occurs before a storm event, and can clearly be causally connected with the dam owner's management decision rather than a force of nature. On the other hand, flooding during or after a storm may or may not be causally connected to the dam. Dam owners will escape liability if they can show that flooding would have occurred in the absence of the dam. In this sense, prophylactic management to limit the risk of dam failure from anticipated storms may perversely increase the risk of liability unless carefully managed to avoid downstream flooding.

3.4 Liability Based on Floodplain Development

Floodplain development can change whether and how dam owners are liable for flooding. In many cases, Rhode Island dams were constructed when the number of people and structures affected by a dam release or failure was more limited than today. Floodplain development has changed the potential for injury to people and property resulting from dam releases, with consequences for the potential liabilities and defenses of dam owners. In particular, floodplain development may affect whether a dam is abnormally dangerous and whether the defenses of assumption of risk and coming to the nuisance are available.

Floodplain development may affect whether a dam is considered abnormally dangerous. A dam may become abnormally dangerous over time due to increased potential harm upon failure; indeed, the risk associated with failure is the basis for RIDEM's dam classification scheme. As a result, downstream developments may make dam owners more likely to be subject to strict liability in tort. On the other hand, development does not appear likely to affect the viability of negligence, conversion, or trespass claims. However, development will increase the damages associated with these tort claims.

Floodplain development may enable dam owners to assert the affirmative defenses of assumption of risk and coming to the nuisance when facing certain tort claims. However, these defenses have challenges for dam owners. Assumption of risk requires actual knowledge and acceptance of an unreasonable risk. In most cases, floodplain development will not be so obviously at risk of flooding

¹⁴⁹ 568 U.S. 23 (2012).

that property owners cannot avoid knowing their risk as a matter of law. As a result, the defense may not be successful in most cases. Contributory negligence does not require actual knowledge of risk and thus may be more applicable, but it is only available in negligence cases. It is also possible the doctrine of “coming to the nuisance” may limit private nuisance claims.¹⁵⁰ However, the doctrine is not a total bar against claims with similar facts, but rather is “one factor that may be considered in determining whether or not a defendant's or a respondent's conduct was an unlawful interference with a neighbor's real estate.”¹⁵¹ In practice, therefore, tort claims will remain highly fact-intensive and dependent on the actions and practices of dam owners and other responsible parties.

4 Dam Liability in a Regional Context

A regional perspective is useful to assess the extent to which Rhode Island law is consistent with broader trends in liability affecting dam owners. While most claims discussed in the previous section are available in other states, their implementation and details may differ. This section focuses on three areas of particular relevance and difference from state to state, which were selected based on stakeholder feedback. These include: (i) the applicability of statutory liability provisions to dam owners after storms; (ii) whether strict liability or nuisance applies to dam flooding cases; and (iii) whether states have limited drawdowns through injunctive relief or damages. For each topic, this section reviews provisions in nearby states before drawing comparisons with Rhode Island law.

4.1 Statutory Liability Provisions

Rhode Island’s statutory liability provisions can best be understood in the context of similar laws in other states. As the Rhode Island Supreme Court explained, the Mill Dam Act is consistent with similar legislation in other states:

For the promotion of manufactures, Legislatures in most of the states have enacted so-called “Mill Acts,” giving to a riparian proprietor upon a stream, where water power may be utilized, the right to increase the impelling force of the current at his land by the erection of a dam and the setting back of the water of the stream beyond the limit of his own land and upon that of a proprietor above, with provision for compensation in damages, and with the restriction, generally expressed in the act, that a proprietor cannot flow back and obstruct the operation of a mill privilege above which has already been established by authority of law.¹⁵²

Similarly, other states also have dam safety provisions of more recent vintage. This section considers the status of statutory liability in other Northeast states to illustrate the extent to which the limits on liability under Rhode Island law are consistent with nearby states, with a focus on “flowage acts.”

¹⁵⁰ *Weida v. Ferry*, 493 A.2d 824, 826-27 (R.I. 1985).

¹⁵¹ *Id.* at 827.

¹⁵² *Slatersville Finishing Co. v. Greene*, 101 A. 226, 228 (R.I. 1917).

- Connecticut has established a flowage statute providing for payment of damages caused by impoundment of waters behind new dams.¹⁵³ This statute provides a process for determining whether the proposed dam is of public use and, if so, for determining the damages owed by its owner to the upstream property owner.¹⁵⁴ Unlike mill acts in other northeast states, the Connecticut flowage law does not include a general statement of dam owner liability. As a result, injured property owners cannot use this statute to recover damages for storm-related flooding caused by dams.
- The Massachusetts Mill Act provides a statutory action for landowners to seek compensation for damages caused by the creation of dams in the state.¹⁵⁵ The Act does not create new claims for damages, but instead was intended “to substitute for common law remedies a more ‘simple, expeditious and comprehensive mode of ascertaining damages’ recoverable at common law.”¹⁵⁶ As a result, common law claims against dam owners are not available unless the dam owner is subject to and violates an order under the Mill Act.¹⁵⁷ Owners of dams covered by the Act must compensate for flooding caused by the impoundment of water behind the dam, independent of fault. Specifically, “[t]he owner or occupant of land which has been overflowed or otherwise injured by such dam may bring a civil action to obtain compensation therefor.”¹⁵⁸ A jury determines the amount of damages caused by the water, which may be payable annually or in gross, and sets the maximum height of the dam.¹⁵⁹ The Act applies to dams that “raise water for working of” a water mill¹⁶⁰ and to lands flowed for a “domestic reservoir corporation,”¹⁶¹ but it does not apply to existing dams unless they are raised or otherwise materially change.¹⁶² The Massachusetts Mill Act thus provides limited liability coverage to certain dams and types of flooding (i.e., upstream flooding).

Massachusetts law contains a second, more general statement that dam owners are liable for flooding caused by a dam. Specifically, a dam owner “shall be responsible and liable for damage to property of others or injury to persons, including but not limited to, loss of life

¹⁵³ CONN. GEN. STAT. §§ 52-446 – 52-445.

¹⁵⁴ *Id.* § 52-447.

¹⁵⁵ MASS. GEN. LAWS ch. 253, §§ 1 *et seq.*

¹⁵⁶ *Lombardi v. Bailey*, 147 N.E.2d 169, 174 (Mass. 1958) (quoting *Duncan v. New England Power Co.*, 145 N.E. 427, 428 (Mass. 1924)).

¹⁵⁷ *Leonard v. Wading River Reservoir Co.*, 113 Mass. 235, 236 (Mass. 1873) (“if a mill-owner builds or maintains his dam contrary to the conditions and restrictions imposed by the jury under proceedings duly had according to the statutes, he loses the immunity from suits at law provided by the statute, and is liable to an action for damages as a wrong-doer.”); *Brady v. Blackinton*, 55 N.E. 474, 475 (Mass. 1899).

¹⁵⁸ MASS. GEN. LAWS. Ch. 253, § 4.

¹⁵⁹ *Id.* §§ 3, 7-9.

¹⁶⁰ *Id.* § 1 (“A person may, as hereinafter provided, erect and maintain a water mill and a dam to raise water for working it”). Subsequent sections of the Act refer to “such dams.”

¹⁶¹ *Id.* § 42.

¹⁶² *Id.* § 20.

resulting from the operation, failure or misoperation of a dam.”¹⁶³ The judiciary has jurisdiction to enforce this section.¹⁶⁴ However, this section does not explicitly create a private right of action, so private plaintiffs are unlikely to be able to use it.

- New Hampshire’s extensive dam statutes establish the duty of owners to maintain dams, and breach of that duty may result in negligence liability. Dam owners “shall maintain and repair the dam so that it shall not become a dam in disrepair.”¹⁶⁵ A “dam in disrepair” is defined as a dam that “is a menace to public safety and is incapable of safely impounding flood waters to its crest, or is incapable of maintaining a reasonably constant level of waters impounded, or is one which does not contain adequate gates and sluiceways to provide for the holding or controlled discharge of waters impounded.”¹⁶⁶ The state Supreme Court has established that the statutory requirement to maintain dams “provides a standard of conduct on the part of dam owners intended to protect against damage from the flooding of the land of others by their dams.”¹⁶⁷ Violation of the statutory duty to maintain dams is an element of a negligence claim.

New Hampshire statutes contain a second potential grounds for statutory damages against dam owners that is analogous to the Rhode Island Mill Dam Act. It provides:

If the land of any person shall be overflowed, drained or otherwise injured by the use of any dam or addition to such dam and the damage shall not, within 30 days after due notice of such damage, be satisfactorily adjusted by the party erecting or maintaining the dam or increase in such dam, either party may apply by petition to the superior court in the county or counties where such damage arises to have said damage that has been or may be done assessed.¹⁶⁸

While this language suggests a right of action to recover any damages resulting from floods arising from dam operations, the state courts have rejected this interpretation. “This statutory proceeding provides for the assessment of damages when the mill owner exercises the flowage right given by the mill act. It is not intended to be for the recovery of damages for an act of wrongful flowage. In such a case there was a common law right of action for damages. Plaintiffs [*sic*] petitions seek to recover damages resulting from a tortious flooding of their land and do not come within the purpose of” this section.¹⁶⁹ Based on this holding, this provision does not impose liability for flooding associated with severe storm events.

¹⁶³ MASS. GEN. LAWS. Ch. 253, § 48B; 302 MASS. CODE REGS. § 10.13 (repeating language).

¹⁶⁴ MASS. GEN. LAWS. Ch. 253, § 50.

¹⁶⁵ N.H. REV. STAT. § 482:11-a.

¹⁶⁶ *Id.* § 482:2(V).

¹⁶⁷ *Moulton v. Groveton Papers Co.*, 289 A.2d 68, 70-71 (N.H. 1972).

¹⁶⁸ N.H. REV. STAT. § 428:33.

¹⁶⁹ *Moulton*, 289 A.2d at 72 (internal citations omitted) (interpreting version of section prior to immaterial amendment).

- New Jersey has not enacted a statute that expressly determines liability for dam owners.
- New York statutes establish a duty to maintain dams in a safe manner, but the statutes do not establish private liability. “[I]n response to several dam failures that caused significant flooding in New York during the 1990s,”¹⁷⁰ the New York Legislature amended the state Environmental Conservation Law to require that “[a]ny owner of a dam or other structure which impounds waters shall at all times operate and maintain said structure and all appurtenant structures in a safe condition.”¹⁷¹ Violation of this duty may result in administrative penalties, but it cannot be used to support lawsuits by private claimants because it does not create a private right of action.¹⁷² As a result, claims for damages by individuals must be evaluated under the common law.

This analysis suggests that Rhode Island law is consistent with flowage acts in other northeast states in limiting liability under these provisions. Massachusetts, New Hampshire, and New York have analogous liability provisions in their flowage acts, but only Massachusetts provides a cause of action for lawsuits by property owners injured by dam operations. Even in Massachusetts, the scope of the Mill Act is limited to certain types of dams and applies primarily to flooding caused by erection of a new dam rather than flooding caused by excessive water levels. The other states lack a private cause of action (New York) or only allow damages at the time of initial construction (New Hampshire). Based on the exclusion or substantial limitations on liability associated with “flowage acts” in northeast states, limits on the use of the Rhode Island Mill Dam Act to recover flood damage due to failure or severe storms appear consistent with regional trends.

4.2 Strict Liability and Negligence

Commentators have noted that states have not uniformly adopted strict liability for dam failure or flood damages.¹⁷³ While most states have adopted some forms of strict liability, the application of this theory to dam owners has been mixed. Where strict liability is not used, courts apply negligence standards instead. This section reviews the use of strict liability and negligence in northeast states before comparing regional trends with Rhode Island law.

- The few dam liability cases decided in Connecticut have been uniformly based on negligence rather than strict liability. For example, in *Beauton v. Connecticut Light & Power Co.*, the Connecticut Supreme Court considered a case brought by plaintiffs who claimed that negligent construction and operation of a dam caused their cottages to be swept away and destroyed after a “freshet” destroyed flashboards.¹⁷⁴ The court agreed that negligence was

¹⁷⁰ *Hosmer v. Kubricky Constr. Corp.*, 931 N.Y.S.2d 738 (N.Y. App. Div. 2011).

¹⁷¹ N.Y. ENVTL. CONSERV. LAW § 15-0507.

¹⁷² *Alaimo v. Town of Fort Ann*, 883 N.Y.S.2d 321, 324 (N.Y. App. Div. 2009) (“A dam owner who violates ECL 15-0507(1) may be penalized, but only the Attorney General is specifically authorized to bring an action to recover those penalties.”) (citing *Nowak v. Madura*, 757 N.Y.S.2d 773 (Mem.) (N.Y. App. Div. 2003)).

¹⁷³ See THOMAS, *supra* note 71, at 6-9; Binder, *supra* note 65, at 23.

¹⁷⁴ 3 A.2d 315, 316 (Conn. 1938).

appropriate, stating that “[t]he defendant in this case was not an insurer; the measure of its duty in the construction and operation of its dam was to use reasonable care.”¹⁷⁵ State courts have similarly applied negligence standards in other cases.¹⁷⁶ Connecticut courts have accepted strict liability in limited contexts, such as blasting and piledriving,¹⁷⁷ but have not considered a strict liability claim to date arising from dam failure or other dam-related flood events. As the relevant dam failure cases are dated, it is possible that a case arising from a future dam failure or flood event could alter whether and how strict liability may apply in Connecticut.

- Massachusetts courts have explicitly adopted strict liability and applied it to dam failure. In *Clark-Aiken Co. v. Cromwell-Wright Co.*, the plaintiff brought an action to recover for damage caused when water stored behind a dam on the defendant’s property was released and flowed onto the plaintiff’s property.¹⁷⁸ Based on a lengthy discussion of the history of strict liability in Massachusetts, including for dams, the court held that strict liability has long existed in Massachusetts and can apply to dam failures.¹⁷⁹ It explained that the six factors set out in the Restatement (Second) of Torts must be applied to the facts and circumstances of each case to determine whether strict liability applies.¹⁸⁰ Where these factors do not support strict liability, plaintiffs may seek compensation under a negligence claim.¹⁸¹ Thus, Massachusetts adopts the strict liability standard set out in the Restatement, providing a strong basis for plaintiffs to seek compensation for damages resulting from dam losses.
- New Hampshire courts have clearly rejected strict liability for dam failures.¹⁸² While the state has accepted strict liability in some circumstances, such as products liability, the court in *Moulton v. Groveton Papers Co.* held that the considerations that led the court to adopt strict liability in product liability actions are “substantially different from those which prevail in the case of dams.”¹⁸³ As a result, it declined to extend strict liability to dam cases. To recover, plaintiffs must instead bring claims under a negligence theory and establish each required

¹⁷⁵ *Id.* at 319 (Conn. 1938).

¹⁷⁶ *Wargo v. Connecticut Light & Power Co.*, 18 A.2d 924, 926 (Conn. 1941); *City of Bridgeport v. Bridgeport Hydraulic Co.*, 70 A. 650 (Conn. 1908); *Krupa v. Farmington River Power Co.*, 157 A.2d 914 (Conn. 1959).

¹⁷⁷ *See, e.g.*, *Whitman Hotel Corp. v. Elliott & Watrous Engineering Co.*, 79 A.2d 591, 595 (Conn. 1951) (pile-driving); *Green v. Ensign-Bickford Co.*, 595 A.2d 1383 (Conn. App. 1991) (explosives).

¹⁷⁸ 323 N.E.2d 876, 877 (Mass. 1975).

¹⁷⁹ *Id.* at 878-886 (citing *Bratton v. Rudnick*, 186 N.E. 669 (Mass. 1933); *Golden v. Amory*, 109 N.E.2d 131 (Mass. 1952)).

¹⁸⁰ *Id.* at 887-888 (quoting RESTATEMENT (SECOND) TORTS §§ 519-20).

¹⁸¹ *Id.* at 883 (“The plaintiff must decide whether it is more economic and feasible to establish negligence under appropriate pleadings, or to prove that the activity in question comes within the parameters of strict liability.”).

¹⁸² *Moulton v. Groveton Papers Co.*, 289 A.2d 68 (N.H. 1972).

¹⁸³ *Id.* at 72 (noting that strict liability is needed for products to address “multiple difficulties encountered in obtaining relief under [] warranty provisions.”).

element, including that owners failed to meet their duty to maintain dams so that they are not “dams in disrepair.”¹⁸⁴

- New Jersey courts adopted strict liability as a concept in *State v. Ventron Corp.*,¹⁸⁵ where the state Supreme Court held a landowner strictly liable for harm caused by toxic wastes escaped from his property and flowed onto that of his neighbors.¹⁸⁶ In its reasoning, the court stated, “an ultrahazardous activity which introduces an unusual danger into the community...should pay its own way in the event it actually causes damage to others.”¹⁸⁷ The court adopted the six-factor test described in the Restatement (Second) of Torts to determine whether an activity is ultrahazardous.¹⁸⁸ Thus, as in other states that have adopted this test, a plaintiff could prevail on a strict liability claim in a dam flooding case if she can prove that the dam operations are ultrahazardous; if not, the plaintiff would need to show negligence to recover damages, as considered in a variety of past dam flooding cases.¹⁸⁹
- New York law has adopted strict liability for abnormally dangerous activities, which may apply to dams. In 1873, the New York Court of Appeals rejected the strict liability doctrine in *Losee v. Buchanan*.¹⁹⁰ However, modern courts have accepted strict liability in the state for abnormally dangerous activities, applying the factors in the Restatement (Second) of Torts to determine whether the doctrine applies to particular factual circumstances.¹⁹¹ In *Doundoulakis v. Town of Hempstead*, the state’s highest court noted with approval analysis suggesting these factors may be met as a result of water impoundment resulting in groundwater seepage.¹⁹² As a result, it is reasonable to expect that courts may apply strict liability to cases involving dam failure. Damages cases that do not meet the standards for strict liability, on the other hand, will be evaluated under negligence. For example, upstream owners of property on a dam that failed recently were held to have successfully stated a negligence claim for loss of waterfront property.¹⁹³ In such cases, plaintiffs must show that the dam owner has breached its duty to maintain the dam and damages will be limited to property and personal injury, exclusive of economic losses.¹⁹⁴ Common law tort remedies in New York thus include strict liability

¹⁸⁴ See *Town of Monroe v. Connecticut River Lumber Co.*, 39 A. 1019, 1021 (N.H. 1894) (“[I]t was a duty cast upon the defendants by the law to so use and maintain the dam as not unnecessarily to endanger the safety or property of others; and, if they neglected this duty, the law renders them liable for the consequences.”).

¹⁸⁵ 94 N.J. 473 (N.J. 1983).

¹⁸⁶ *Id.* at 488.

¹⁸⁷ *Id.* at 478.

¹⁸⁸ *Id.* at 491 (quoting RESTATEMENT (SECOND) OF TORTS § 520 (1977)).

¹⁸⁹ See, e.g., *Tower Marine, Inc. v. City of New Brunswick*, 420 A.2d 1029 (N.J. Super. 1980); *Kidde Mfg. Co. v. Town of Bloomfield*, 118 A.2d 535 (N.J. 1955).

¹⁹⁰ 51 N.Y. 476, 487 (N.Y. 1873) (“if one builds a dam upon his own premises and thus holds back and accumulates the water for his benefit, . . . in case the dam . . . give way and the lands of a neighbor are thus flooded, he is not liable for the damage without proof of some fault or negligence on his part.”).

¹⁹¹ *Doundoulakis v. Town of Hempstead*, 368 N.E.2d 24 (N.Y. 1977).

¹⁹² *Id.* at 27 (“the case strongly suggests that strict liability treatment may be appropriate.”).

¹⁹³ *Alaimo v. Town of Fort Ann*, 883 N.Y.S.2d 321, 3223-24 (N.Y. App. Div. 2009).

¹⁹⁴ 532 *Madison Gourmet Foods v. Finlandia Ctr.* 96 N.Y.2d 280, 290-292 (N.Y. 2001).

against all dam owners where warranted by the facts of a case, and negligence claims in other circumstances.

Northeast states apply negligence and strict liability to dam failures and flooding similarly in most instances, although there are some differences. Negligence is accepted in all of the states, but plaintiffs may face higher standards to recover in some jurisdictions. New Hampshire and New York negligence law is notable because these states have established statutory duties of care applicable to dam owners. Thus, owners in these states must maintain dams in a safe condition as a matter of law, such that dam failure effectively indicates a breach of this duty. For example, New Hampshire law provides that a dam that cannot safely impound flood waters or that has inadequate spillways is a “dam in disrepair” and therefore indicates a breach of the owner’s duty. The owner of a dam that must release flood waters for safety reasons—or which lacks sufficient spillway capacity to deal with more severe storms caused by climate change—thus appears to have breached its duty to maintain the dam. A dam failure or of intentional releases to reduce pressure on a dam thus would suggest that the owner has breached its statutory duty, thereby satisfying the first two elements of a negligence claim. This breach is likely to apply even if the structure was designed to handle a predicted maximum flow that was appropriate when it was built: courts have held owners responsible for adjusting to changing patterns of water flow whether caused by changing climate or changing land use patterns.¹⁹⁵

Rhode Island lacks a statutory standard of care applicable to dam owners. As a result, failure to adapt dams to changes in predicted maximum flows may not trigger negligence liability. On the other hand, state dam inspection requirements may provide a proxy for a statutory duty of care. In other words, a dam owner is likely to be negligent if it has not remedied safety issues identified by OCI. Thus, while a statutory duty to maintain safe dams could clarify the scope of dam owner duties in Rhode Island negligence cases, courts are likely to consider results of existing regulatory processes when deciding whether dam owners have been negligent.

Implementation of strict liability in the northeast states is relatively consistent. While New Hampshire does not recognize strict liability, the other states—including Rhode Island—have adopted the six-factor test set out in the Restatement (Second) of Torts for at least some ultrahazardous activities. Thus, dam-related plaintiffs in these states may validly claim damages under a strict liability theory. To recover, however, they must show that the dam was ultrahazardous through evidence about its particular context. Courts have applied the doctrine to dam-related flooding in two states—Massachusetts and New York—leaving the others (including Rhode Island) without specific authority to draw upon. Nonetheless, given the use of dams as an example of an ultrahazardous activity in the Restatement, it is likely that courts will accept the validity of the strict

¹⁹⁵ Board of Ed. of Borough of Manasquan v. State Dep’t Transp., 351 A.2d 17, 20 (N.J. 1976) (discussing with approval Riddle v. Baltimore & Ohio R.R. Co., 73 S.E.2d 793, 800 (W. Va. 1952) (“[A] railroad which constructs a culvert in its roadbed must provide for such floods as may reasonably be anticipated in view of the local climate and history, and although the railroad may have used reasonable care in the original construction of the culvert, if subsequent developments prove that it is insufficient it becomes the duty of the railroad to improve the culvert to meet the changed condition.”)).

liability doctrine in some dam cases—perhaps significant- and/or high-risk dams—if and when called upon to do so.

4.3 Liability for Drawdown

Drawdowns prior to significant storm events may reduce the risk of dam failure and/or avoid the need for intentional releases. However, dam owners may face legal limits on drawdowns, including injunctions and damages. This section discusses the limits on drawdowns in each coastal northeast state as a baseline for comparison with Rhode Island law, which was discussed in full in section 3.3. These limits include both statutory and common law restrictions on drawdowns.

- The Connecticut Supreme Court has required a dam owner to maintain the level of a dam and prohibited the destruction of the dam where the owner’s predecessor had covenanted with the neighboring owners to do so.¹⁹⁶ However, “riparian owners may prevent only the unreasonable lowering of the lake by a dam owner.”¹⁹⁷ Reasonableness is determined by specifics of particular cases, such as who owns the land under the pond, whether the dam is on a navigable stream, the nature of the right claimed by the plaintiff (e.g., recreation, fishing), and whether that party or abutting property owners have property rights protecting their rights to use the pond.¹⁹⁸ Courts have upheld lake level reductions for flood control,¹⁹⁹ and courts are unlikely to deem lake level reductions unreasonable if they are intended to protect public safety.
- Dam drawdowns in Massachusetts are restricted by the state Wetlands Act. In Massachusetts, this act requires owners to notify and obtain approval from the municipal conservation commission prior to undertaking any action that may alter a wetland, including the banks of a pond.²⁰⁰ This requirement applies to dam impoundments, and lowering water levels is an “alteration” that triggers the approval requirements.²⁰¹ The Wetlands Act does provide exemptions, however, including for emergencies and for an “existing and lawfully located structure or facility” used to provide water, electric, or other utility services to the public.²⁰² As a result, public water reservoirs are not required to notify the conservation commission prior to reducing water levels for flood control, but other dam owners must obtain prior approval before changing water levels.

¹⁹⁶ *Labbadia v. Bailey*, 205 A.2d 377 (Conn. 1964).

¹⁹⁷ *Lake Williams Beach Ass’n v. Gilman Bros. Co.*, 496 A.2d 182, 185 (Conn. 1985).

¹⁹⁸ *Ace Equipment Sales, Inc. v. Buccino*, 869 A.2d 626 (Conn. 2005).

¹⁹⁹ *Id.*

²⁰⁰ MASS. GEN. LAWS ch. 131 § 40; *Central Water Dist. Assoc. v. Dep’t of Envtl. Prot.*, 2 Mass. L. Rptr. 81 (Mass. Super. Ct. 1994).

²⁰¹ *Central Water Dist. Assoc.*, 2 Mass. L. Rptr. 81.

²⁰² *Id.*; MASS. GEN. LAWS ch. 131 § 40.

- New Hampshire law allows dam owners to draw down the levels of their impoundments. Dam owners have not been required to maintain water levels in New Hampshire courts.²⁰³ Moreover, New Hampshire has a unique statutory process whereby lake levels may be altered for emergency purposes. The Department of Environmental Services, which regulates dams, is authorized to investigate and control high and low levels, including by ascertaining “the extent to which owners and managers of dams take into consideration variations of runoff and plan for and anticipate emergencies.”²⁰⁴ It is directed to seek dam owners’ cooperation in regulating flow to “minimize damage to public and private property at times of high water” and can “direct” dam owners to hold or release water when “an emergency exists or is threatened.”²⁰⁵ Thus, New Hampshire has established clear legal authority to manipulate impoundment levels to reduce potential flood events in anticipation of storm events.
- New Jersey law provides a statutory limitation on reduction of reservoir levels in certain circumstances. Abutting landowners, the local government, or municipal residents can file a petition with the state to protect and require the maintenance of any dam that has existed for more than 20 years, has developed shorelines, or “has become a valuable resource for the quality of life.”²⁰⁶ Once filed, the dam owner must obtain approval from the commissioner before lowering water levels “below the usual low-water mark.”²⁰⁷ In such cases, abutters may be required to contribute to dam maintenance under the state Safe Dams Act. Thus, New Jersey dam owners may be limited in their ability to change water levels due to opposition from riparians, but these limits do not mandate maintenance at the high-water line.
- The ability of dam owners to change the level of impoundments in New York depends on the ownership of the impounded waters. Courts have declined to require dam owners to maintain lake levels at a particular height in the absence of an express agreement to do so.²⁰⁸

²⁰³ New Hampshire dam owners have not been held subject to limits on drawdowns in suits brought by abutters. *See* *Fish v. Homestead Woolen Mills*, 592 A.2d 1151, 1153 (N.H. 1991) (“[W]e decline to extend the defendants’ duty of due care in maintaining their dam to include protection against injuries which arguably resulted from the lake’s lower water level, which was still above the natural low-water mark. Were we to do otherwise, we would be imposing upon dam owners a duty to maintain a specific “safe” water level in their respective lakes. This would not only place an unreasonable burden on dam owners to determine and maintain a level of water that offers minimum risk to all possible users but would also be contrary to the long-established rights of dam owners.”); *Whitcher v. State*, 181 A. 549, 556 (N.H. 1935) (“[T]he plaintiff’s right is to use as much water, at least down to the natural low-water mark, as is necessary for use at his privilege, provided he makes no intentional misuse and causes no unnecessary annoyance and damage to the defendants.”).

²⁰⁴ N.H. REV. STAT. § 482:4.

²⁰⁵ *Id.*

²⁰⁶ N.J. STAT. § 58:4-9.

²⁰⁷ *Id.*

²⁰⁸ *Lake Claire Homeowners Ass’n v. Rosenberg*, 626 N.Y.S.2d 540 (N.Y. App. Div. 1995); *accord* *Guglielmo v. Unanue*, 664 N.Y.S.2d 662 (N.Y. App. Div. 1997) (“The fact that plaintiff may have lake privileges, a right not specifically provided in his deed, does not give him the right to enforce [a] covenant [regarding dam maintenance and lake level].”); *Bird v. Trust Co. of N.J.*, 651 N.Y.S.2d 246 (N.Y. App. Div. 1996).

However, control of the level of state-owned lakes is a “sovereign power of the State” that can be exercised only by the legislature.²⁰⁹ The case establishing this precedent considered Lake George, a large lake, and the legislature has duly exercised its role to require dam owners to maintain the lake level within explicit average levels.²¹⁰ This mandate, however, contains a specific exception for “emergencies,” which would allow dam owners to reduce levels based on expected storm events.

Other navigable lakes lack a specific level set by legislation, but must maintain levels within limits. Courts have noted that “if the lake is navigable then it is presumptively under the ownership of New York State, on behalf of the public, at the low water mark.”²¹¹ Navigability, in turn, is a factual determination that includes recreational use.²¹² Under these precedents, dam owners may lack legal authority to independently change the level of impoundments large enough to be navigable, but on other impoundments their ability to lower lake levels is limited only by contractual obligations or property rights held by abutting owners. These limits may be, but are not required to be, included in dam construction permits issued by the Water Resources Commission.²¹³ In addition, storage reservoirs operated for river regulations are required to maintain levels between low- and high-flow levels, except that high levels may be exceeded in “floods or other emergencies.”²¹⁴

Northeast states have adopted a range of approaches to dam drawdowns. Massachusetts, like Rhode Island, requires approval from environmental regulators prior to changing water levels. Unlike Rhode Island, Massachusetts has an emergency exception to its Wetland Act authority, as well as an exception for utility and drinking water reservoirs. By contrast, Rhode Island dam exceptions are tied to dam hazard characteristics and provide more limited exceptions for emergency repairs. As a result, preemptive and seasonal drawdowns require RIDEM approval in Rhode Island, but may be authorized without approval in Massachusetts.

Consistent with Rhode Island law, states other than New Jersey rejected claims to particular water levels by upstream riparian owners absent an agreement by the dam owner. New Jersey is the exception, having established a statutory process for water level claims—which requires abutting beneficiaries to contribute to dam maintenance.

Unlike Rhode Island, New Hampshire and New York provide state authority to set water level limits in dam impoundments. All states that have recognized limitations on dam drawdowns, however, recognize exceptions, including reasonableness, utility drawdowns, and flood and emergency

²⁰⁹ *People v. System Props., Inc.*, 141 N.E.2d 429, 435 (N.Y. 1957) (“Exercise of [sovereign] rights includes control of the river and, as against this sovereign right and responsibility, the dam operator could never acquire any such prescriptive rights as would interfere therewith.”).

²¹⁰ N.Y. NAV. LAW § 38.

²¹¹ *Rogers v. South Slope Holding Corp.*, 656 N.Y.S.2d 169, 172 (N.Y. Sup. Ct. 1997).

²¹² *Id.*

²¹³ *Allen v. N.Y. Water Res. Comm’n*, 299 N.Y.S. 586 (N.Y. Sup. Ct. 1969) (upholding permit that did not establish lake level).

²¹⁴ N.Y. ENVTL. CONSERV. LAW § 15-2133.

drawdowns. These exceptions are likely to apply to any dam drawdowns prior to a storm event that are intended to reduce subsequent flood risks. Rhode Island could consider setting similar exceptions should it establish dam level authority in the future.

5 Conclusion

Dam owner liability in Rhode Island is a complex and uncertain issue that is highly dependent on the facts of each particular case. Rhode Island dam owners face potential liabilities under statutory, common law, and constitutional law, each of which is affected by factors such as the type of flooding, the role and actions of the parties involved, the type and use of the dam, and the management decisions employed. In most instances, Rhode Island law is consistent with regional trends. However, Rhode Island case law is limited, such that some issues remain uncertain. For example, the application of the Mill Dam Act liability provisions and authorization for drawdowns have not been resolved. Dam owners facing uncertain liability may benefit from the use of proper dam management practices to reduce the risk of failures and associated injury until their legal obligations are clarified as a result of statutory action or additional court decisions.