# HANDOUT:
# NEXT-GENERATION PROJECTS: ADAPTING TO CLIMATE CHANGE

**13TH ANNUAL GREEN INFRASTRUCTURE CONFERENCE**
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## Resilience as Liability

As natural disasters intensify, courts and regulators (and plaintiffs) are increasingly looking to utilities, governments, design professionals, and developers for legal accountability—not just for negligence, but for failing to anticipate foreseeable climate risks. When does the once optional "resilient design" that goes above and beyond code compliance become a component of the emerging standard of care? Different legal theories have been asserted to address the impact of climate change, both the potential in the future and to address past damage from extreme weather. Whether challenging fossil fuel extraction through statute constitutional rights, seeking recovery under a theory of inverse condemnation, directly challenging regulatory action, or seeking to modify the standard of care, individuals outside the building and infrastructure development, design, construction, or insurance industries are acting.

### California

Individuals in many states are seeking restitution for damages exacerbated by climate change through inverse condemnation actions—a trending theory in this arena.

An action for inverse condemnation is rooted in the Takings Clause of the Fifth Amendment to the United States Constitution, which prohibits the government from taking private property for public use without paying just compensation (U.S. Const. amend. V; see Just Compensation). It is not necessary that property should be absolutely taken, in the narrowest sense of that word, there may be such serious interruption to the common and necessary use of property as will be equivalent to a taking, within the meaning of the Constitution. (*Pumpelly v. Green Bay & Mississippi Canal Co.*, 80 U.S. 166, 172, 20 L. Ed. 557 (1871)). The federal Takings Clause applies to states and local governments through the Fourteenth Amendment. *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 536 (2005).

In addition to the federal Takings Clause, state constitutions also provide protections against governmental takings. *See, e.g.*., Cal. Const. art. I, § 19; Fla. Const. art. X, § 6; Ill. Const. art. I, § 15; Mass. Const. Pt. 1, art. X; N.J. Const. art. I, ¶ 20; N.Y. Const. art. I, § 7; Pa. Const. art. I, § 10; Tex. Const. art. I, § 17; *see Knick v. Twp. of Scott, Penn.*, 139 S. Ct. 2162, 2168 (2019) (noting that, except for Ohio, every state provides a state inverse condemnation action)). Plaintiffs seek to broaden this theory from only applying to government agencies, so as also to apply to any agencies authorized by the state or required by a state constitution to provide a vital public service.

[1] States comparable and interpreted in line with the Federal Takings Clause: Florida, California, and New Jersey

For example, in 2017, the Thomas Fire raged across California resulting in one such inverse condemnation action. *Simple Avo Paradise Ranch, LLC v. S. Cal. Edison Co.*, 102 Cal. App. 5th 281, 321 Cal. Rptr. 3d 305 (2024), *review denied* (Aug. 28, 2024). A high wind event caused power lines owned by Southern California Edison Company (SCE) to contact each other, known as a "line slap," creating an electrical arc which deposited burning material onto dry vegetation below causing it to ignite. This wildfire resulted in over 280,000 acres burned, over 1,000 structures destroyed, and two fatalities.

Hundreds of lawsuits filed against SCE were coordinated into three plaintiff groups: individuals, public entities, and subrogation plaintiffs. The individual plaintiffs' master complaint alleged inverse condemnation, arguing SCE was a public entity for the purpose of providing electricity and that property damage was caused by risks inherent in the design, construction, or maintenance of its electrical system. SCE sought demurrer of the complaint, which was denied by the trial court. A member of the plaintiff group and SCE settled for an undisclosed amount and entered into a stipulated judgment where SCE would pay $1.75 million to Simple Avo on the inverse condemnation claim, subject to SCE's appeal of the demurrer ruling. In May 2024, the California Court of Appeal sided with the plaintiffs.

A. Public Entity
The appeals court rejected SCE's argument that it was not subject to inverse condemnation as a private utility, finding no rational basis for distinguishing them from privately-owned utilities.

B. Substantial Causation and Inherent Risk
The plaintiffs alleged SCE failed to maintain aging infrastructure despite known safety risks to which the appeals court agreed that these failures substantially caused the wildfires and resulting damages.

C. Public Use
The complaint alleged the power lines that ignited the Thomas Fire were part of an electrical distribution system serving thousands of acres in Central, Coastal, and Southern California. Following precedent, the appeals court held this electric distribution system was for the public use.

As such, the demurrer was upheld and the stipulated judgment affirmed.

Next Generation Long-Term Fire Retardant: Researchers at Stanford University, led by materials scientist Eric Appel, is attempting to address the wildfire climate challenge by developing a wildfire gel that can be applied to vegetation, structures, utilities, and other at-risk areas. This gel, currently marketed as Phos-Check Fortify, acts as a protective barrier, preventing ignition and reducing the spread of wildfires. The gel can remain effective for long periods through changing weather conditions and can be applied through standard weed control/spray delivery methods. You can read more about the wildfire gel, and its other applications, at the links below:

- https://news.stanford.edu/stories/2024/08/new-gels-could-protect-buildings-during-wildfires
- https://woods.stanford.edu/20x20-pioneering-innovative-wildfire-prevention-products
- https://woodsinstitute.stanford.edu/system/files/publications/Wildfire_Prevention_Gel_Brief.pdf
- https://woods.stanford.edu/news/new-treatment-helps-prevent-wildfires

## Michigan

In January 2026, a trial is scheduled in in regarding liability over a privately owned dam that caused widespread flooding. Plaintiffs brought claims for ***inverse condemnation***, alleging that the Edenville Dam's failure and subsequent damage to their properties constituted an unconstitutional taking by defendants. The dam, which flooded in 2020, caused over 2,500 homes to be damaged and hundreds of millions of dollars of damage. In the lawsuit, Plaintiffs allege that defendants took affirmative actions that led to the dam's failure—including wrongfully certifying that the dam was in fair condition and capable of use, denying a drawdown permit to Boyce to lower lake water levels, and authorizing the water levels to be raised in spring 2020—all with full knowledge that the dam would fail from heavy rainfall and flooding. Plaintiffs also allege that, despite the dam being privately owned by Boyce, defendants' operational control over the dam constituted a public use. *Krieger v. Dep't of Env't*, 348 Mich. App. 156, 166, 17 N.W.3d 700, 716, appeal denied, 513 Mich. 951, 998 N.W.2d 212 (2023).

On May 13, 2025, the Michigan trial court denied summary judgment, finding that there was sufficient evidence in the record that could demonstrate state regulators at the Department of Environment, Great Lakes and Energy were aware that the dam was at risk of failing but continued to require lake levels be maintained out of concern for freshwater mussels. Later, in July 2025, the court certified a class action related to the dam's failure, which applies only to the liability phase of the litigation. Trial on the liability phase is set to begin in January 2026. *Krieger v. Mich. Dep't of Env't*, Ingham County Consolidated Case Nos. 20-000094-MM, 20-000102-MM, 20-000103-MM, 20-000111-MM, 20-000112-MM, 20-000116-MM, 20-000118-MM, 20-000121-MM, 20-000140-MM, 20-000151-MZ, 20-000156-MM, 20-000230-MZ, 20-000232-MZ, 20-000233-MM, 20-000235-MM, 20-000236-MM, 20-000237-MM, 20-000239-MM, 20-000240-MM, 20-000241-MM, 20-000245-MM, 20-000246-MM, 20-000257-MM, 20-000260-MM, 20-000262-MM.

## Montana

In a ***constitutional climate litigation*** decision on December 10, 2024, the Montana Supreme Court affirmed a district court's ruling in *Held v. Montana*, 419 Mont. 403, 560 P.3d 1235 (2024), holding that state agency decisions that disregard or fail to consider and evaluate climate change impacts violate Montanans' constitutional rights to a clean and healthful environment. *Id.* The 6-1 majority opinion is the first of its kind at the state supreme court level and confirmed that Montana state entities must assess greenhouse gas emissions and their attendant environmental and public health consequences—particularly as they impact minors—when issuing permits for new fossil fuel projects, even if such analysis is not required by the federal Clean Air Act. *Id.* at 176 ("The absence of federal standards . . . does not affect [the] requirement to conduct an adequate MEPA analysis that comports with MEPS's unique role in protecting Montanans' constitutional right to a clean and healthful environment," which is "the strongest environmental protection provision found in any state constitution.").a

## Texas

Even when acting proactively to address the future effects of climate change, public entities are subject to challenges when those requirements render development more expensive or prohibit certain types of development. This type of inverse-condemnation is a ***regulatory taking*****.** A developer The Commons of Lake Houston (The Commons) first began developing a 3,300-acre residential community near Lake Houston in 1993, focusing on one phase at a time. *Commons of Lake Houston, Ltd. v. City of Houston,* 711 S.W.3d 666, 673 (Tex. 2025), reh'g denied (May 30,

2025). One of those phases, The Crossing, received various permits and waivers from the City in early 2017. In reliance on those permits and waivers, the developer invested over $1 million in the Crossing. The City code, however, required The Commons to obtain a floodplain-development permit or a variance as part of the permitting process. In August 2017, "Hurricane Harvey struck the Houston area, dumping over sixty inches of rain, breaking flood-damage records and directly causing at least sixty-eight deaths." *Id.* at 674. In response and anticipating FEMA would revise its maps to identify new special flood hazard areas, the City amended its ordinances in 2018 to increase elevation requirements for construction in floodplains from one foot above the 100-year floodplain to two feet above the 500-year floodplain. *Id.* The Commons filed suit against Houston in 2020 asserting that the amendment increased the required slab elevations by an average of 5.5 feet and, as a result, rendered 557 of the 669 total lots undevelopable. *Id.* The Commons asserts the amended ordinance caused a regulatory taking for w. h the Texas Constitution requires reasonable compensation.

The trial court ruled in favor of The Commons and Houston appealed. The Court of Appeals reversed and remanded holding The Commons failed to assert a valid takings claim "because the City amended the ordinance as a valid exercise of its police power and to 'track' the criteria of the federal National Flood Insurance Program." *Id.* at 675.

On March 21, 2025, the Texas Supreme Court reversed and remanded to the trial court for further proceedings to determine whether the amended ordinance caused a compensable taking under the Texas Constitution. *Id.* The Texas Supreme Court focused on the third element of an inverse-condemnation action: "whether the City's amendment to its floodplain ordinance caused a taking, damaging destroying or apply of The Commons's property." *Id.* at 676. The Court noted that it recognized two types of takings, one of which is "a regulatory action that is so restrictive or intrusive that it effectively takes the property." *Id.* (cleaned up). The Court compared the Texas constitution to the U.S. Constitution, noting that the Texas constitution requires compensation in more circumstances, including actions that interfere with a property owner's use and enjoyment. *Id.* 678. The Texas Supreme Court reversed the court of appeals and remanded for further proceedings on whether the floodplain ordinance as applied to the lots in The Crossing could satisfy the requirement that a ***regulatory taking*** deprive The Commons "of all economic benefit" or "unreasonably interferes with its use and enjoyment of the property." *Id.* at 683-84.

A petition for a writ of certiorari with the United States Supreme Court was denied on October 14, 2025. --- S.Ct. ---, 2025 WL 2906526.

## Washington

The state of Washington, in an effort to combat climate change, passed a Climate Commitment Act (CCA) that provides no-cost emissions allowances to electric utilities, but requires non-utility owners to purchase allowances for power plants. RCW 70A.65.120. Invenergy Thermal LLC and Grays Harbor Energy LLC own an electricity-generating natural gas power plant in Washington State. In 2022 in a ***constitutional challenge***, they sued the state, challenging this provision of the CCA . *Invenergy Thermal LLC v. Watson, No. 23-3857*, 2024 WL 5205745, at *1 (9th Cir. Dec. 24, 2024). Invenergy and its subsidiaries alleged that the Act's distribution of no-cost allowances violates the dormant Commerce Clause and the Fourteenth Amendment's Equal Protection Clause of the United States Constitution. *Id.*

The district court initially held that the companies lacked standing to pursue their claims but agreed with the state of Washington's position that the CCA treats all owners of electric utilities the same, regardless of whether those owners are in-state entities or out-of-state entities. *Id.* Invenergy appealed to the Ninth Circuit, which reversed the district court's decision that it lacked standing but upheld the decision on the merits — finding that Washington's no-cost allowances to electric utilities neither discriminated against nor imposed an undue burden on interstate commerce. *Id.* at *2, *3. The Ninth Circuit found that the CAA served legitimate state interests and dismissed the claims with prejudice. *Id.* at *3. In May 2025, Invenergy filed a petition for a writ of certiorari to the United States Supreme Court which was denied on October 6, 2025. *Invenergy Thermal LLC v. Watson, No. 23-3857*, 2024 WL 5205745, at *1 (9th Cir. Dec. 24, 2024), cert. denied sub nom. *Invenergy Thermal LLC v. Sixkiller*, No. 24-1027, 2025 WL 2823727 (U.S. Oct. 6, 2025).

The affects of changes in climate arise under general theories of liability, such as the foreseeability element in ***negligence claims***, or standard ***breach of contract claims***. One example involves construction litigation over exterior panels on a mixed-use residential project in downtown Seattle. In 2015, Sellen Construction entered into a contract with Urban Visions, a development firm, for the construction of a residential building in downtown Seattle. *Urban Visions MFA Second and Pike, LLC v. Sellen Construction Co., Inc.*, No. 23-2-11572-4 SEA (King County Sup. Ct. 2023). Sellen subcontracted with a third party for the installation of metal siding panels, custom manufactured by a company called Metl-Span, on the exterior of the building. *Id.* After the building was complete, Seattle experienced an extreme heat event caused by a "heat dome" between June 26 and July 2, 2021, where daytime temperatures exceeded 100 degrees Fahrenheit each day setting all-time records in many locations. Later that month, Urban Visions discovered blistering, rippling, and warping of the metal panels asserting that the property damaged was continuing to occur that was so prevalent and extensive that all of the metal panels needed to be replaced. *Id.*

After failing to replace the panels despite a notice of defects, in June 2023, Urban Visions filed a breach of contract action against Sellen alleging that Sellen is wholly or in part responsible for the property damages losses as result of the defective panels. *Id.* The case was scheduled for trial the week of October 6, but settled shortly thereafter. Although based upon typical theories of negligence, strict liability, breach of contract, and implied warranties, the effects of climate on the build environment exposes contractors and design professionals to claims and potential liability.

<u>Does the environment have legal rights?</u> Another avenue to protect the environment from construction and development is to bestow it rights. In a unique step in November 2024, the residents of the City of Everett in Washington voted via initiative to provide the Snohomish River, which runs through the City, with legal rights.[1] (Initiative 24-03) The initiative grants the right the right to "exists, regenerate, and flourish," which includes the right to natural flow, clean water quality, and freedom from activities that violate its rights. The initiative also gives any resident within the

[1] The City of Everett is not the first in the United States to pass a law providing rights to water features. Orange County in Florida and Toledo, Ohio both passed local laws recognizing legal rights. The Florida law (Orange County Charter § 704.1) was struck down as preempted by a Florida statute that specific prohibited local laws from granting legal rights to parts of natural bodies of water. *Wilde Cypress Branch, Crosby Island Marsh, et. al v. Hamilton*, Case No. 6D23-1412, Sixth Circuit of Appeal (Fla. Jan. 19, 2024) In Ohio, a federal court found the local law (the Lake Erie Bill of Rights) to be unconstitutionally vague. *Drewes Farms P'shp v. State of Ohio*, Case No. 3:19-cv-00434-JZ (USDC N. Ohio, Feb. 2020)

watershed the ability to use polluters and developers on behalf of the river if they believe a violation has occurred. Any fines or penalties awarded as a result would fund river restoration.

The initiative is currently being challenged in Snohomish County Superior Court, where a hearing was held on October 24, 2025. *Master Builders Assoc. of King and Snohomish Counties, et. al v. The City of Everett*, Snohomish County Case No. 25-2-00902-31.

## Catastrophic and Resilience Bonds Transferring Risk Away from Insurers

These bonds are an example of insurance securitization, creating risk-linked securities which transfer a specific set of risks (typically catastrophe and natural disaster risks) from an issuer or sponsor (ceding company) to capital market investors.

Examples Include:

- New York Metropolitan Transportation Authority (MTA) catastrophic storm bond for $100M
- California Tahoe National Forest resilience bond for $4M
- Florida's Citizens Property Insurance Corporation catastrophic hurricane season bond for $1.1B

## Changes Driven at State and Local Levels to Enact Climate Resiliency Design Standards

New Jersey Resilient Environments and Landscapes (REAL) – adoption planned for January 2026

- Requiring resilient design and construction in current and future flood-prone areas

California 2025 Title 24 Code Changes – effective January 2026

- Requiring ember-resistant vents, non-combustible siding, and 100-foot defensible space around homes

California 2023 SB 272

- Addressed the need for coordinated standardized sea level rise adaptation by requiring local governments along the San Francisco Bay shoreline to develop Subregional Shoreline Adaptation Plans

New York Decarbonization and Climate Resiliency Design Guide – adopted in January 2025

- Requiring climate projections and adaptation strategies in design and expected operations and management in state-owned buildings for new construction and renovation over 10,000 $ft^2$ and/or greater than $2M.