Legal Risk Analysis for Sea Level Rise
Adaptation Strategies in San Diego

Environmental Law Institute
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Summary
Adapting to sea level rise raises significant legal questions for local governments, especially in California. On the one hand, taking action could decrease risk to the community, but increase litigation risk from aggrieved property owners or public interest groups, depending on the nature of the action. On the other hand, a local government could decide not to act, exposing people and infrastructure to excess risk, while potentially exposing itself to litigation if the lack of action causes harm to individuals or public trust property. Risk is thus unavoidable. However, different adaptation strategies (including deciding not to take action) carry different risk profiles. This report concisely summarizes the legal risks and administrative hurdles associated with different adaptation strategies in order to facilitate informed decision-making.

Background
In 2015, several local governments in San Diego County began to evaluate sea level rise vulnerabilities, and embarked on updating their Local Coastal Plans (LCPs) to reflect planned adaptations to these risks. Through a coordinated effort led by the San Diego Regional Climate Collaborative, these local governments identified several challenges they expected to face in undertaking the LCP updates. This included a lack of expertise and knowledge about the legal liabilities associated with sea level rise adaptation strategies. With funding from the National Oceanic and Atmospheric Administration’s Regional Coastal Resilience Grant program, this report is intended to address that knowledge gap, and provide the local jurisdictions within the area encompassed by The Resilient Coastlines Project of Greater San Diego¹ an easy-to-understand legal guide to inform their decision-making.

This report leverages similar work produced by other legal scholars. Two papers in particular deserve considerable credit for laying the groundwork for sea level adaptation strategy analysis, from a legal perspective, in California. The first, written by Megan Herzog and Sean Hecht, focuses on how local governments in California can manage sea level rise.² The second, authored by Meg Caldwell and Craig Segall, considers how the existing legal framework can be interpreted to allow for sea level rise adaptation, along with potential obstacles to taking these approaches.³

The first section of this paper provides an overview of important legal principles, summarizing information from this prior body of work for an audience comprising both non-lawyers and lawyers looking for a refresher. The second section builds upon past work to develop a risk overview for specific adaptation strategies. The aim is to provide local government planners with reference materials helpful to understanding how the law works in practice. The third section provides an overview of legal risk in

cases where a municipality decides to take no action. In summary, this paper provides practical, planning-oriented summaries of risk associated with both action and non-action scenarios.

The information provided in this document is not legal advice. Rather, this paper serves as a primer on the multiple types of legal risk and administrative difficulties associated with sea level rise adaptation for Southern California municipalities. Most of the research for this report was completed prior to April 2017.
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Overarching Legal Principles
Certain legal doctrines and policies are relevant to implementation of California-based sea level rise adaptation strategies. The most important overarching legal principles are introduced below. The principles are expanded on below, in sections related to specific strategies, such as beach nourishment and offshore protections.

Public Trust Doctrine
The public trust doctrine is an ancient legal doctrine rooted in common law. This doctrine provides that all navigable waterways and submerged tidelands are held in trust by states for public commerce, navigation, and fishing. In other words, states effectively own trust lands, including coastal areas expected to be impacted by sea level rise.

In California, the public trust doctrine applies up to the mean high tideline, and the public trust has expanded over time to include water-oriented recreation, land preservation, and habitat protection. The California Coastal Act further clarifies the public trust doctrine, providing for maximum access to trust lands consistent with other priorities, including “the [public’s] use of dry sand and rocky coastal beaches.” The California Legislature granted “jurisdiction and authority” of state trust lands to the State Lands Commission, which grants leases for the use of sand, among other purposes. The state can convey public trust lands (subject to other laws), but the lands “generally remain subject to a public trust easement.”

It is important to note that the physical area, to which the public trust applies, theoretically moves with the rising seas. One centimeter of sea level rise may result in the mean high tideline moving 40 centimeters inland, on a relatively flat beach. When the tideline migrates to private land, the public theoretically has a reversionary trust interest in the land, meaning the land reverts back to state

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12 See Herzog & Hecht, supra note 2, at 13 (citing a staff report from the California Coastal Commission). The exact amount of rise depends on site-specific factors.
ownership. However, as will be discussed later, this issue is complicated in practice since, among other considerations, many property rights could be impacted by this strict definition of the public trust.

In 2013, the state legislature enacted AB 691, which required local trustees (including municipalities) with revenues exceeding $250,000 annually to address the impacts of sea level rise on public trust lands by July 1, 2019. According to the Land Commission’s website, only the Port of Long Beach completed its assessment as of April 2017. Other municipalities are in the process of completing their assessments, and there is information on available grants on the Land Commission’s website.

Municipalities can face legal risk arising under the Public Trust Doctrine when a private party or public-minded organization believes the government entity took its public trust responsibilities too far (or not far enough). Most often, when cases do arise, either “plaintiffs’ private interests are the motivating force behind the litigation”, or “public entities [are] seeking to protect public trust values for the broader benefit of the citizenry.” For example, a private plaintiff might sue when denied a permit to build near the mean high tideline (these claims would likely include an allegation of a violation of the Coastal Act and the Takings Clause of the U.S. Constitution). A public-minded organization may also sue to prevent beach nourishment or armoring on the theory that they do not constitute valid trust purposes.

Takings Clause of U.S. Constitution

The Takings Clause of the Fifth Amendment of the U.S. Constitution states that the government cannot “take” private property without providing just compensation. A taking without just compensation is sometimes called “inverse condemnation.” Takings cases are fact-specific, and courts tend to find takings only rarely because of the broad police powers under which governments exercise valid regulatory authority.

The clearest case of a taking is direct appropriation of property, or “physical” taking, when the government appropriates private property without compensation (such as by building a dune on private property above the mean high tideline). In addition, a claim of inverse condemnation could arise when

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13 See Id. See also United States v. Milner, 583 F.3d 1174 (9th Ct. 2009) (holding that property owners could be liable for trespass when they erected armoring structures that fell below the mean high tideline).
16 See Assem, Bill, supra note 14.
17 See id.
20 See Const. amend. 5; Cal. Const. art. I, § 19(a).
an action (such as beach nourishment or flood control) causes damage on private land (such as through flooding). The damage must be a “direct, natural, or probable result of an authorized activity.”

The Takings Clause also forbids regulatory takings when a regulation “goes too far.” Regulatory takings include depriving a property owner of all economically beneficial use of the property (such as a zoning policy that prevents all development without legal justification). However, a regulation that “goes too far” does not amount to a taking if it merely codifies background principles of law, like the public trust doctrine and nuisance law.

If there is only a partial diminution in property value (such as a zoning policy that prevents certain types of development), three factors are balanced: (1) economic impact of the regulation; (2) reasonable investment-backed expectations of the property owner; and (3) character of the regulation.

Finally, permit exactions (such as conditions incorporated into a development permit) are subject to the Nollan-Dolan Test. This test states that exactions must have a nexus and rough proportionality to the impact of the development. In other words, a permit requiring a property owner to do something as a condition of the permit is not a taking, so long as the action is of the same general nature and extent as the development’s impact on the wider community or environment.

Legal risk to municipalities primarily arises from aggrieved private property holders. Examples include: a beach nourishment project that leads to pooling on private property (subject to an inverse condemnation claim); zoning laws that prevent property owners from obtaining certain types of construction permits authorizing projects on or near the high tideline (subject to analysis as a total or partial diminution in property value); and permit conditions that forbid or restrict seawalls (subject to Nollan-Dolan analysis). Each of these will be discussed in regards to specific adaptation strategies later, and it is important to note that takings lawsuits are heavily fact-dependent.

As noted by J. Peter Byrne and Jessica Grannis, experts in this area of law, takings litigation “can be uncertain, lengthy, expensive, and, fairly or not, stigmatizing.” Yet “courts should recognize the reality and inevitability of sea-level rise... and the propriety of reshaping private property rights to

22 See Herzog & Hecht, supra note 2, at 55-56.
23 Nicholson v. United States, 77 Fed. Cl. 605, 616 (2007). Failure to maintain public works or faulty design could also be the basis for liability. See St. Bernard Parish v. United States, 696 F.3d 436 (5th Cir. 2012) cert denied sub nom; St. Bernard Parish Gov’t v. United States, 121 Fed. Cl. 687 (2015) (finding the U.S. liable because the Army Corps of Engineers was grossly negligent in operating levee and canal systems before Hurricane Katrina).
accommodate broad environmental interests and the public trust.”

According to the scholars, the risks presented by takings litigation—especially litigation that is unlikely to be successful on the merits in the case of well-crafted adaptation policies—are small relative to the massive benefits that come from taking action against sea level rise.

Eminent Domain
Eminent domain is compensated taking of land for public use. In California, a public use “concerns the whole community or promotes the general interest in its relation to any legitimate object of government.”

California Coastal Act
The California Coastal Act details permitting, planning, and regulatory requirements for the coastal zone, which generally extends 1000 yards inland from the high tide line to the state’s outer limit of jurisdiction. Local governments (cities and counties which lie in the coastal zone) implement the Coastal Act through Local Coastal Programs, consisting of a Land Use Plan and a Local Implementation Plan. Most development (broadly construed under the Act) in the coastal zone requires a Coastal Development Permit (CDP) from municipalities with certified Local Coastal Programs, and from the Coastal Commission in certain instances. All development on public trust lands, for example, requires a CDP from the Coastal Commission. Local governments may attach “reasonable terms and conditions” to CDPs to further local policies, including preserving and restoring marine resources and enhancing public access to the coast. CDPs can be appealed to the Coastal Commission. Any approved CDP and conditions attached must be consistent with the California Environmental Quality Act (CEQA).

Legal risk could arise from suits filed by private property owners who allege that zoning regulations in the LCP (such as setbacks or hazard overlays), or permit decisions and/or conditions in a CDP, constitute a taking of their property. Private property owners may also allege that elements in the LCP or permit decisions violate the Coastal Act and/or CEQA. When challenged in a formal complaint, the local

30 Id. at 278.
33 There are 76 such counties and cities and many have divided their jurisdictions into separate geographic segments. In total, there are 126 LCP segments. Local Coastal Programs, Cal. Coastal Comm’n, available at https://www.coastal.ca.gov/lcps.html.
35 “Development means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials,” among other things. Cal. Pub. Res. Code § 30106.
36 If the municipality does not have a certified LCP, the California Coastal Commission is responsible for permitting. Cal. Pub. Res. Code § 30600.
government and/or Commission’s actions are reviewed by state courts for abuse of discretion. The courts will find an abuse of discretion when the action “does not proceed in the manner required by law, its order or decision is not supported by the findings, or its findings are not supported by substantial evidence.”

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires state and local agencies to analyze whether discretionary government actions (including carrying out projects, planning actions, granting permits, and approving private actions) have a significant effect on the environment. If initial review indicates there will be no significant effect, the agency may adopt a negative declaration. If the review indicates there may be a significant effect, and the applicant modifies the project to eliminate the significant effect, the agency may adopt a mitigated negative declaration. If neither is possible, the agency must prepare an Environmental Impact Report (EIR). In some circumstances, categorical exemptions are permitted.

An EIR analyzes significant effects on the environment and how the effects can be mitigated or avoided through modifications. An agency cannot carry out or approve a project with significant effects, unless: (1) changes that mitigate or avoid the adverse impacts are incorporated in the project; (2) those changes “are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency”; and/or (3) “specific economic, legal, social, technological, or other considerations” make alternatives infeasible. In sum, if there is at least the potential for a project to result in a substantial adverse change, feasible mitigation measures must be implemented. In the

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48 In application, courts are split in whether sea level rise is classified as a significant effect on the environment that must be analyzed. In Ballona Wetlands Land Trust v. City of Los Angeles, the California Court of Appeal for the Second District held that an EIR must analyze “significant effects of a project on the environment,” not “the significant effects of the environment on the project.” 201 Cal. App. 4th 455, 473 (2011). Thus, the court found, an EIR for a mixed-use real estate development is not required to consider the impacts of sea level rise. See id.

However, some scholars think the ruling in Ballona Wetlands stands in contrast to CEQA Guidelines, which requires analysis of whether a project might bring development into an area affected by the project (including development in floodplains, in addition to impacts of the environment on the project. See Herzog & Hecht, supra note 2 at 20-21; Cal. Code Regs. Section 15126.2(a). Another case applied the CEQA Guidelines to hold that an EIR adequately discussed seismic impacts on development near a faultline. See Oakland Heritage Alliance v. City of Oakland, 195 Cal. App. 4th 884, 898-900 (2010). Scholars also deride the finding an Ballona Wetlands as a “depart[ure] from the purpose and past usage of CEQA.” Herzog & Hecht, supra note 2, at 19. See also Order on Petition for Writ of Mandate and Peremptory Writ of Mandate, Club v. City of Oxnard, No. 56-2011-00401161, 2013 WL 8170105 (Cal. App. Dep’t Super Ct. Oct. 15, 2012) (a state trial court opinion stating “[i]t is inconceivable that the Ballona Wetlands Land Trust court is suggesting that the public has no right to know if a CEQA project is being placed
context of sea level rise, such mitigation measures could be requiring “alternative site configurations and alternatives to hard armoring that would reduce or eliminate impacts where a project’s relationship to sea-level rise or related storm surges will adversely affect residents or ecosystems.”

**Endangered Species Act**

The Endangered Species Act seeks to minimize harm to protected species and protect the ecosystems on which they depend. Species listed as “endangered” or “threatened” cannot be subject to a “take”, meaning “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” An incidental take permit allows certain activities to move forward with conditions even when a take will result. When a species is proposed for listing, a designation of critical habitat may be made for areas essential to species conservation. The Coastal Act also contains strong protections for environmentally sensitive habitat areas, which are “protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.”

Legal risk arising from the ESA will originate primarily with public organization litigants, and encompasses all activities that may take listed species or are on/near listed species habitat. For example, a beach nourishment project could introduce sand that has different properties than the sand endemic to the area, resulting in habitat impacts for endangered species that rely on the sand’s properties.

**Marine Protection**

There are a number of Marine Protected Areas (MPAs) along the California coast where it is “unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.” Both direct and indirect impacts near MPAs must be considered to minimize legal risk.

**Clean Water Act**

The Clean Water Act forbids discharge of pollutants into navigable waters of the U.S without a permit. Point-source discharges require a National Pollutant Discharge Elimination System (NPDES) permit under section 402 of the CWA (administered by the EPA and states). Permits are also required for dredging-and-filling of navigable waters under section 404 (administered by the Army Corps of Engineers). Many

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49 Herzog & Hecht, *supra* note 2, at 19.
51 See *id.* §§ 1532(19).
projects in or around coastal areas that involve dredging or filling also require a permit under section 10 of the Rivers and Harbors Act, also administered by the Army Corps.

Notably, CWA permitting may be particularly time-consuming and one of the greatest hurdles for certain projects.

**Traditional Tort Theories**

If a project is carried out in a manner that aggrieves private property owners, it could lead to tort claims of negligence, trespass, or nuisance. Generally, negligence occurs when a party breaches a duty, and that breach causes damages. Negligence claims could arise if an adaptation project causes flooding on property that would otherwise not occur. Nuisance occurs when there is a substantial and unreasonable interference with the plaintiff’s use and enjoyment of their property, such as the public’s beach property. Nuisance claims could occur if an adaptation project blocks access to the ocean in an unreasonable manner. Trespass occurs when there is a violation of the right of exclusive possession (“entry”) and the violator was at least negligent. Trespass claims could arise in the scenario above, when an adaptation project funnels water onto private property without consent of the property owners.
Adaptation Strategies Analysis

Municipalities have three over-arching options for adapting to sea level rise:

- **Protection:** hard armoring (i.e. seawalls and revetments) and soft armoring (i.e. beach nourishment, dune restoration, and offshore protections)
- **Accommodation:** zoning and land use tools to increase resilience (i.e. preventing armoring in certain areas)
- **Retreat:** strategically moving away from rising seas and preventing further at-risk development

In practice, every Local Coastal Program reviewed uses some combination of these three strategies, which determines whether resilience goals are met, the costs and benefits of coastal management, and the legal risks involved.

The first two outcomes—whether resilience goals are met and the costs and benefits of coastal management—are the focus of other parts of the Resilient Coastlines Project of Greater San Diego. Here, we summarize legal risk, including administrative hurdles. It is important to note that different municipalities will have different tolerances for risk. Localities with legal staff may primarily be concerned with losing lawsuits. Others, with limited capacity for hiring legal experts, may be just as concerned with contesting lawsuits, along with the administrative hurdles associated with long permitting processes. It is essential for local government staff to review the justifications for the following risk summaries and adjust accordingly for specific risk tolerances.

The legal risk and administrative hurdles contained in this report are based on three sources of information: court documents (e.g., cases, briefs, and judgments); secondary legal materials (e.g., law reviews and guidance documents); and interviews with lawyers and city planners familiar with sea level rise adaptation. From these materials, we developed risk summaries designed for a practitioner who may not possess a legal background or is not familiar with legal issues in this area.

The compiled risks and hurdles form our summaries below. In general, legal risk is highest for a municipality when an action (or lack of action) could be contested by another party as a “taking.” While risk may be higher for certain actions, projects and planning actions can often be designed in a way to minimize risk while maximizing public good. In many instances, it is beyond the scope of the risk summaries to discuss specific planning tools to balance or mitigate risk in detail, though selected options are included throughout.

Considering both legal risk and administrative difficulty, we summarized risk as follows:

- **Low risk** (all of the following elements applicable): no major hurdles from CEQA or the Coastal Act beyond obtaining permits, takings lawsuit unlikely, no major legal uncertainty about application of Coastal Act or takings law, no other clear legal issues;
- **Moderate risk** (at least two applicable): some CEQA hurdles depending on resources impacted, Coastal Act ambiguous on permitting, moderate probability of takings lawsuit but low probability of local government losing case, other possible legal issues (i.e. ESA);
• High risk (at least two applicable): difficult CEQA process (depending on the location and nature of the project), Coastal Act provision at issue is involved in litigation or uncertain in application, high probability of takings lawsuit and uncertain risk of local government losing case, other major legal issues (i.e. ESA).

Some adaptation strategies fell in between the risk categorizations. These strategies are indicated (i.e. “low-moderate” or “moderate-high”).

“Protection” Strategies

<table>
<thead>
<tr>
<th>Strategy #1: Beach Nourishment</th>
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<tbody>
<tr>
<td><strong>General Legal Risk</strong></td>
</tr>
<tr>
<td>Low-moderate, depending on scope of the project. Generally, regional projects present a higher legal risk, due to the difficulty of attaining buy-in from numerous stakeholders with varying perspectives.</td>
</tr>
<tr>
<td><strong>Overview of Legal Context</strong></td>
</tr>
<tr>
<td>Beach nourishment projects occur mostly on public trust lands or have substantial impacts on public trust lands. Thus, they are carried out by trustees (usually the local governments themselves in conjunction with federal and/or state agencies). In deciding to undertake beach nourishment, trustees face a lengthy permitting process. This makes the administrative difficulty somewhat high—it may be difficult to obtain the necessary permits to move projects forward. However, the legal risk is not as high if there is buy-in from affected stakeholders, including NGOs and homeowners, during the permitting process. In bigger projects, where it is difficult to ensure buy-in due to numerous stakeholders, both administrative hurdles and legal risks are higher. But, as always, legal risk and administrative hurdles are site- and project- specific.</td>
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**Permitting**

Beach nourishment projects require a CDP under the Coastal Act and are likely considered “development” subject to CEQA EIR requirements. As a result, there must be “onsite monitoring and supervision during the implementation of the permit.” Additionally, a State Lands Commission Lease is required for the dredging and disposal of sand on state lands. This requirement includes acquiring a lease for both the source of the sand and location where it is to be deposited. Consultation or an Incidental Take Permit could also be required under the Endangered Species Act. Finally, a Clean Water Act section 404 permit is required, which can prolong the process of getting a project off the ground.

59 See Cal. Fish & Game Code § 2081(b)-(c).
60 See 33 U.S.C. § 1344. These permits involve the U.S. Army Corps of Engineers. In addition, there are a number of Marine Protected Areas along the California coast where it is “unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.” Cal. Code Regs., tit. 14, § 632(a)(1). It may be necessary to consult
Legal Risk Summary

Legal risks arise primarily from takings claims from private landowners, or potentially from CEQA or public trust litigation from NGOs and other parties that oppose nourishment projects.

Beach nourishment could be subject to a claim of inverse condemnation if an adjacent private property suffers harm. The harm would have to be the “direct, natural, or probable result of an authorized activity and not the incidental or consequential injury inflicted by the action.” In California, inverse condemnation is subject to a multi-factor balancing test. The court would weigh:

a) “[t]he overall public purpose being served by the improvement project”;

b) “the degree to which the plaintiff’s loss is offset by reciprocal benefits”;

c) “the availability to the public entity of feasible alternatives with lower risks”;

d) “the severity of the plaintiff’s damage in relation to risk-bearing capabilities”;

e) “the extent to which damage of the kind the plaintiff sustained is generally considered as a normal risk of land ownership”; and

7) “the degree to which similar damage is distributed at large over other beneficiaries of the project or is peculiar only to the plaintiff.”

Other takings claims could arise if there is permanent physical occupation of private property (i.e. sand placed on private property without compensation) or a partial diminution in property value (i.e. expanded beach takes away clear views of ocean). Property owners, or the public, could also sue based on traditional tort theories of negligence, nuisance, or trespass if damage is caused by the beach nourishment project.

CEQA and the public trust doctrine will likely apply to all beach nourishment projects, and project review will also likely consider other statutes like the Endangered Species Act, depending on the location and size of the project. The scope of CEQA review in the near-shore and beach environments is substantial, with a litany of direct and indirect impacts to consider. Because the CEQA analysis may discuss numerous elements, each of which can invite argument that the analysis was inadequate (depending on the location of the project), CEQA presents a legal hook for project opponents to attach lawsuits. Therefore, stakeholder buy-in becomes especially important to avoid the CEQA analysis being challenged.

with the Department of Fish & Game if a project occurs near one of the MPAs. See Cal. Fish & Game Code § 2852(c).
63 See Court Summons, Argoud v. City of Imperial Beach (2013) (settled out of court, details of settlement not disclosed) (on file with author).
Cases provide instructive examples of how lawsuits can arise around beach nourishment projects.

Takings and Inverse Condemnation

In Argoud v. SANDAG, plaintiffs sued under a theory of inverse condemnation when a beach nourishment project allegedly caused “pooling” on their property, resulting in damage to homes and infrastructure. The case was settled out of court, but demonstrates legal risk that arises when undertaking large public projects near private property.

CEQA and Public Trust

Most beach nourishment and dredging projects require CEQA analysis that considers both direct and indirect impacts from the project. Direct impacts can include sand placement affecting habitat. Indirect impacts can include increased pollution from trucks transporting sand; for example, consider the City of Moorpark, which was sued in early 2016 by Ventura County and the City of Fillmore.

Beach nourishment projects (and other shoreline projects) usually involve a long-haul CEQA process, likely including the completion of an EIR. These processes could result in litigation if the project is controversial. San Francisco Baykeeper, Inc. v. California State Lands Commission discussed the numerous requirements under CEQA for projects that involve dredging, which many beach nourishment projects do. Requirements range from analyzing habitat impacts at both the borrow site, where sand was sourced, and at the placement site, reviewing impacts on water quality and projecting flooding changes. Other requirements depend on site-specific factors.

In S.F. Baykeeper, the California Court of Appeal also held that there is an “affirmative duty to take the public trust into account.” In practice, this duty means the municipality must describe why each project is in the public interest, balancing public benefits and costs. While it is likely municipality-led beach nourishment would satisfy that standard in most instances, nevertheless, that court remanded a private sand mining lease on the basis of a lack of such a finding prior to finalizing the lease sale.

Discussion

Beach nourishment and associated dredging projects require hefty environmental

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64 Id.
67 Id. (citing National Audubon, 33 Cal.3d at p. 446, fn. omitted).
analysis under CEQA to even get off the ground. That CEQA review must be robust and thorough. Controversial projects could face lawsuits from public interest organizations or others during this process. During the CEQA review, there will be considerations taken under other statutes as well, like the Endangered Species Act, which could add time to the permitting process. Consequentially, it is often essential to justify projects with a public trust purpose, such as land preservation and habitat protection.

A beach nourishment permit is not particularly likely to face substantive challenges outside of CEQA unless there are site-specific impacts. One example is polluting navigable waters without a permit, which would implicate the Clean Water Act. However, it is possible that private property owners could make an inverse condemnation or takings claim if periodic flooding or other harm occurs as a result of the project.

**Scenarios**

- **Small opportunistic use projects. Legal risk: low.**
  Smaller projects will usually have reduced scope and have less chance of raising a takings claim or CEQA lawsuit, depending on site-specific factors.

- **Large, regional projects. Legal risk: moderate-high.**
  Larger projects can result in increased environmental impacts and more potential to lead to a takings lawsuit, depending on site-specific factors. It may be important to consider insurance and bonding for these types of projects.

- **Sand sourced from or placed in environmentally-sensitive or habitat area. Legal risk: moderate-high.**
  Proximity to marine protected areas and designated habitat under the Endangered Species Act could influence litigation risk from NGOs under CEQA or other statutes.

- **Sand placed near lagoon or river mouth. Legal risk: moderate.**
  Projects near water bodies and wetlands have potentially greater habitat impacts and could result in litigation under CEQA, the Clean Water Act, or in tort claims. A possibility of disrupting water flow will increase litigation risk.

**Strategy #2: Dune Restoration and Enhancement**

<table>
<thead>
<tr>
<th>General Legal Risk</th>
<th>Low, but with possible variation depending on the location. The legal risk analysis for dune projects is similar to beach nourishment, but with less precedent in regards to lawsuits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of Legal Context</td>
<td>Most of the time, dune restoration and enhancement projects are undertaken on public trust lands below the mean high tideline or public lands above the mean high tideline. In some instances, dune projects cross private land, requiring the project applicant to obtain an easement from the landowner. These projects are usually initiated by a public entity in accordance with permits under the Coastal Act and a CEQA analysis. Dunes are often environmentally sensitive habitats.</td>
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</tbody>
</table>
Where dune project areas include habitat for protected species, the CEQA analysis for these projects usually includes consideration of the Endangered Species Act. Often, these projects co-occur with beach nourishment projects, and in those instances (and any others where there are other projects in close vicinity) it is important to consider cumulative impacts under CEQA. If a dune requires an easement or obstructs ocean views, it could be classified as a taking without just compensation.

**Coastal Act**

Dune restoration or enhancement often involves the placement of material in an environmentally sensitive habitat area, making these activities qualify as “development” under the Coastal Act and consequently requiring a CDP. The necessary findings in the CDP may be more robust for these projects, depending on the requirements in the LCP.

**CEQA**

CEQA analysis depends on the size and scope of the project. Under Section 15300 of the CEQA Guidelines, categorical exemptions are granted to certain projects that do not have to comply with “the requirement for the preparation of environmental documents.” For example, section 15333 provides for a categorical exemption for small habitat restoration projects. In general however, qualifying projects are “not to exceed five acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife” provided that:

a) “There would be no significant adverse impact on endangered, rare or threatened species or their habitat.”
b) “There are no hazardous materials at or around the project site that may be disturbed or removed.”
c) “The project will not result in impacts that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

Projects over 5 acres, dune areas with endangered or threatened species, or projects with significant cumulative impacts (for example, from a beach nourishment project) usually, but not always, require CEQA analysis due to the potential for substantial adverse impacts. CEQA analysis and permitting would be more burdensome in an area with endangered species habitat, due to enhanced review requirements, which includes consultation with the Department of Fish and Game.

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71 Id.
Public Trust

Most coastal dune projects will implicate the public trust doctrine through direct or indirect impacts. The public trust purpose of natural habitat protection provides a strong hook for dune projects focused on habitat. However, dune projects focused primarily on moving sand, and not creating habitat or another public trust purpose, could run into legal issues, since the public trust purpose is not at the forefront. In these cases, public benefits may need to be weighed. For example, where access/recreation could be diminished by certain dune projects, these projects must be justified through flood control benefits. Maintaining beach access is often an important consideration for a dune project.

Takings and Other Issues

One way a dune project could elicit a takings claim is if there is damage to adjacent property, as discussed in the beach nourishment section. A claim of inverse condemnation could arise if flooding or some other harm occurred as the “direct, natural, or probable result” of dune restoration or enhancement. Placing dunes on private land without an easement (acquired through eminent domain or sale) could be a taking, because this constitutes a permanent physical occupation. A tort claim, such as nuisance, could also be filed in response to flooding.

If dune construction blocks ocean views from an adjacent private property and a suit is filed, a court would apply the three-prong balancing test (as described above), weighing economic impact, reasonable investment-backed expectations, and public good.

That inquiry would likely turn on whether the private property owner had a reasonable expectation that his or her ocean view would not be blocked, since the other two prongs (economic impact and public good) likely balance each other out (courts have held that diminished ocean view is an economic harm, but that dunes are a public good). Eliminating ocean views has been shown in other jurisdictions to reduce property value substantially. However, in determining the amount of compensation for lost views or easements, courts would likely offset direct economic impact with benefits accrued by the homeowner, like flood protection. Thus, the ultimate compensation could be negligible.

While few cases related directly to dunes exist, there are some instructive examples for key issues in dune restoration and enhancement.

Coastal Act

Coastal Act permitting of a dune restoration or enhancement project specifically focused on sea level rise has not been subject to a lawsuit. However, there have been some cases related to development near dunes. For example, in Ross v.

California Coastal Commission, the court weighed permissible buffer sizes around sensitive habitats.\(^{76}\) The City of Malibu’s LCP required 100-foot buffers for certain environmentally sensitive habitat areas, like coastal bluffs. For others, like dunes, the LCP stated buffers will be determined “to avoid adverse impacts” – a more flexible standard.\(^{77}\) The court held that a 5-foot dune buffer for a development project was a permissible application of the LCP and the Coastal Act. As a general matter, it is important to understand what the LCP says about environmentally sensitive habitat areas, like dunes, and design LCP policies that do not undermine habitat protection.

### CEQA

Given the environmentally sensitive nature of dunes, almost all larger-scale dune construction projects will require CEQA analysis, due to the potential for adverse impacts. However, some dune projects focused primarily on habitat restoration may not require preparation of a full CEQA analysis. For example, the Humboldt County Dunes Project included 71.5 acres of nearshore dunes targeted for “removal of ice plant, annual grasses, and European beachgrass,” along with removal of yellow bush lupine from backdunes.\(^{78}\) That project qualified for a negative declaration because there was “no substantial evidence based upon the whole record that the dune restoration component of the project will have a significant adverse effect on the environment.”\(^{79}\)

Smaller projects may qualify for a categorical exemption.\(^{80}\) For example, a 2016 Santa Monica beach dune restoration project “to address future sea level rise and coastal flooding related to climate change” qualified for the categorical exemption for small dune projects.\(^{81}\) The project “consists of the utilization of existing sediments to passively restore and transform approximately 3 acres of the current beach into a sustainable coastal strand and dune habitat complex which would be resilient to sea level rise.”\(^{82}\)

In general, the size of the project, its purpose (whether habitat- or construction-focused), the presence of threatened or endangered species, whether a categorical exemption applies, and cumulative impacts in conjunction with other projects (including foreseeable projects in the future) determines the scope of the CEQA analysis.

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\(^{77}\) Id. at 929.


\(^{79}\) Id.

\(^{80}\) For a more complete discussion of categorical exemptions beyond the scope of this analysis, see Berkeley Hillside Preservation v. City of Berkeley, 60 Cal. 4th 1086 (2015).


\(^{82}\) Id.
Takings

While there are no takings lawsuits about ocean views obstructed by dunes in California, *Borough of Harvey Cedars v. Karan* confronted just that issue in New Jersey. In that case, property owners refused to grant an easement for dune construction, contending it obstructed their ocean view and diminished property value. The trial court awarded Karan $375,000 for a partial taking after the dune construction commenced regardless. However, on appeal, basing its decision on state law, the Supreme Court of New Jersey held that eminent domain proceedings for the easement can consider all benefits accrued from the project (similar to how the law operates in California). Ultimately, Karan received only $1 as just compensation for the partial takings because “quantifiable storm protection benefits provided by sand dunes and beach replenishment must be factored into the fair compensation equation.” Thus, it is likely that if a municipality can prove the dunes are necessary for flood protection due to sea level rise and/or the property owner would receive substantial benefit, then just compensation would be low.

Summary

Coastal dune restoration and enhancement projects require permits and often environmental analysis, but they have not been subject to many lawsuits in California. This is probably due to stakeholder outreach and involvement in the project. A takings lawsuit could be brought by a private property owner who does not want to grant an easement for a dune project on his or her land, or who objects to obstructed views or secondary flooding. On the whole, though, dune projects seem relatively low risk when they are implemented strategically.

- **Small habitat-oriented projects. Legal risk: low.**
  Smaller habitat projects could be exempt from CEQA, would involve a less burdensome permitting process, and are unlikely to result in a takings claim if they do not require an easement across private property.

- **Large projects to prevent flooding of private and public property. Legal risk: moderate.**
  Larger projects focused on flood protection likely involve significant dune enhancement, which would require CEQA review and could face legal and permitting hurdles if the project includes threatened or endangered species habitat. The substantive risk of a takings claim is likely low since flood protection benefits would offset compensation required for an easement or loss of ocean views. But with big projects, the risk of a lawsuit

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84 Id. at 528.
85 See id. at 543.
being brought is ever-present, even if unlikely to succeed on the merits.

<table>
<thead>
<tr>
<th>Strategy #3: Offshore Protections</th>
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<tr>
<td><strong>General Legal Risk</strong></td>
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| Overview of Legal Context | Offshore protections (like breakwaters) avoid most of the thorny takings issues raised by projects on private property. However, these projects raise potential permitting issues related to the interplay of multiple permitting entities and stakeholders. Breakwater projects minimize legal risk when their purpose is to protect the coastline from erosion, they do not cause adverse environmental impacts (such as disturbing benthic habitat), and they do not result in impacts to established surf breaks or shipping lanes. |

**Permitting**

Projects for offshore protections require permits from the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Both processes can be time-consuming.

If breakwaters are constructed within the 3-mile boundary for state waters, a CDP is also required. Under Section 30235 of the Coastal Act, breakwaters “shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.”

However, permits for new development like breakwaters must “neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.” The CDP process will consider numerous site-specific factors, many of which will be outlined in a CEQA analysis (like impacts to shipping, recreation, and habitat).

Offshore protections projects also fall under the jurisdiction of the State Lands Commission, which has authority over all un-granted submerged lands. The Lands Commission can grant authority to construct breakwaters that “do not unreasonably interfere with the uses and purposes reserved to the people of the State.” Project applicants must undergo a lease application process that usually

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requires consultation with the Lands Management Division of the Lands Commission.\footnote{91}

**CEQA**

Offshore protections often alter natural shoreline and ocean processes, and thus likely require CEQA analysis. This analysis addresses any significant effects on the environment and how the effects can be mitigated or avoided through modifications.\footnote{92} Of particular importance are direct and indirect habitat impacts (including impacts to marine protected areas), recreation impacts (i.e. surfing), and long-term erosion impacts. This analysis must incorporate public trust principles— for example, balancing whether erosion protection from breakwaters is offset by other purposes that may be harmed, like access and recreation.\footnote{93}

**Takings**

Private property is not directly impacted during construction, making a takings claim unlikely unless the offshore protection causes on-shore damage. The general rule is that property owners have no right to the flow of sand carried by ocean currents in their natural state.\footnote{94} Therefore, long-term erosion caused by changing ocean currents resulting from the installation of a breakwater would not support a takings claim. If construction of offshore protections causes artificial accretions, the general rule is that the land remains in state ownership.\footnote{95} However, if increased wave energy or other actions that result from installation of a breakwater constitute “permanent physical invasion of or encroachment”\footnote{96}, an inverse condemnation claim could be supported.

**Factual Context**

Legal risks from offshore protections like breakwaters are highly site-specific, depending on the nature of the coastline. Removing breakwaters presents similar legal issues as constructing breakwaters. One example of a potential removal project provides an interesting case study. In 2016, the City of Long Beach and the U.S. Army Corps of Engineers signed a Federal Cost Share Agreement to begin the East San Pedro Bay Ecosystem Restoration Study. The study will analyze benefits of ecosystem restoration and the impacts of various restoration options, including removing parts of the existing coastal breakwater.\footnote{97} The study focuses on impacts to the environment, surfing, and shipping.\footnote{98}

\footnote{91 See Leases and Permits, California State Lands Commission, \textit{available at} \url{http://www.slc.ca.gov/Leases-Permits/Leases-Permits.html}.}


\footnote{93 See Cal. State Lands Comm’n, The Public Trust, \textit{available at} \url{http://www.slc.ca.gov/About/Docs/PublicTrust.pdf}.}

\footnote{94 See Miramar Co. v. City ex rel. Santa Barbara, 23 Cal. 2d 170, 173 (1943).}

\footnote{95 See State of Cal. ex rel. State Lands Comm’n v. Superior Court, 900 P.2d 648, 650 (Cal. 1995).}

\footnote{96 Colberg, Inc. v. State ex rel. Dept. of Public Works, 67 Cal. 2d 408, 424-25 (1967).}

\footnote{97 See East San Pedro Bay Ecosystem Restoration Study, City of Long Beach, \textit{available at} \url{http://www.longbeach.gov/citymanager/tidelands/bay-ecosystem-study/}.}
The study was an outgrowth of the Surfrider Foundation’s “Sink the Breakwater” campaign, which used legal and political tactics to restore the surfing conditions that made Long Beach the “Waikiki of California” prior to the breakwater’s construction. If Long Beach did not have such a rich surfing history, the breakwater may not have faced the same legal and political risks. However, if the breakwater is removed, there is a possibility that private property owners initiate a takings claim if their land is damaged during a storm.

Permitting

There is a paucity of caselaw on the application of CEQA, the CWA, and the Coastal Act to offshore protections. Municipalities making decisions to permit breakwaters must comply with their LCP, and design the breakwaters in a way that will secure project approval from the Coastal Commission (likely requiring consultation with the Commission). CEQA analysis will need to be thorough, considering numerous site-specific factors. The permitting process involving the Army Corps will need to be initiated early, given the potentially time-consuming nature of the process.

Takings and Accretions

Takings law is not entirely clear regarding offshore public works projects that cause damage to private property. Several cases arose after major breakwater construction during the World War II period. In *Miramar Co. v. City of Santa Barbara*, a hotel operator sued over a breakwater three miles away, alleging that “the normal course of the ocean currents was changed, causing the waters gradually, continuously and progressively to wash away its sandy beach.”99 A plurality of the California Supreme Court ruled that there was no taking because the erosion “was an incidental consequence of the state's use of the public domain for a public interest that was at all times superior to private littoral rights.”100

In a later case, the Supreme Court of California clarified that there can be no taking “for impairment or curtailment of all rights not damaged by permanent physical invasion [] or encroachment.”101 In other words, it seems that normal, long-term erosion caused by changes in sand transport that result from the installation of a breakwater cannot sustain a takings claim, since a landowner has no right to the “flow of sand carried to his land by the ocean currents in their natural state.”102 However, if there is permanent physical invasion or encroachment caused by a public works activity like a breakwater, an inverse condemnation is possible. What constitutes permanent physical invasion in this situation remains unsettled. However, one court distinguished *Miramar Co. v. City of Santa Barbara* and found that an inverse condemnation case was supported when:

98 See id.
99 23 Cal. 2d 170, 177 (1943).
100 Id. at 176.
102 Miramar Co. v. City of Santa Barbara, 23 Cal.2d at 173.
“[a] dredging project caused erosion of [] properties as a result of increased wave energy created by boat and ship traffic and the steep, offshore gradient and deepwater sinks created by the dredging [] adversely affected the transport of sediments and deprived [the properties] of lateral support.”

Reading the cases together, erosion caused by changes in normal sand transport resulting from the installation of offshore protections likely does not amount to a taking, but increased wave energy resulting from the installation of offshore protections that damages property could. Other scenarios could likely arise depending on site-specific factors.

If, instead of erosion, a breakwater causes accretions that increase sand area, it is likely that the land remains in state ownership. In fact, the California artificial accretions rule states that:

“As between the state and private upland owners, land along tidelands and navigable rivers that accretes by artificial means ... remains in state ownership, and does not go to the upland owner... Accretion is artificial if directly caused by human activities in the immediate vicinity of the accreted land.”

“Artificial accretions” include those created by “works of man, such as wharves, groins, piers, etc., and by the dumping of material into the ocean.” Therefore, land created by the construction of offshore protections would qualify. The primary question is thus whether the breakwater is within the “immediate vicinity” of the accreted land. Such decisions are “decided on a case-by-case basis.” However, “the larger the structure or the scope of human activity ... the farther away it can be and still be a direct cause of the accretion.”

In *City of Los Angeles v. Anderson*, a private landowner disputed ownership of an acre of land that accreted after construction of a breakwater in San Pedro Bay. The court found that the “erection of a structure below the line of ordinary high water” fell within the artificial accretions rule and the state retained ownership.

**Summary**

Offshore protections are major projects that likely require allocating a significant amount of time to move through the permitting process. This introduces administrative hurdles. Legal risk for applicants could derive from cases filed by NGOs concerned about environmental or recreation impacts. The types of impacts that result from offshore protection projects need to be considered thoroughly in...
the CEQA process. Some legal risk arises after construction from flooding or avulsion events that result from the construction of a breakwater. However, normal erosion over time is unlikely to support a takings claim.

- **Sand retention breakwater. Legal risk: low-moderate**
  Permitting may be time-consuming due to CEQA analysis and the multiple federal and state agencies involved in the permitting process. However, lawsuits (such as a takings claim) from private landowners are unlikely and any land that accretes due to the sand retention belongs to the state.

- **Multi-use sites (e.g., artificial reefs that also serve as breakwaters). Legal risk: low-moderate.**
  If the breakwater has multiple uses, it is unlikely to change legal risk, though it could affect some CEQA analysis due to different environmental impacts.

- **Offshore protection in a surf-break area. Legal risk: high.**
  Surf breaks are vigorously protected by citizens and NGOs, and any new breakwater construction that may affect surf breaks is likely to be challenged.

- **Offshore protection near an MPA. Legal risk: moderate.**
  Breakwaters and other protections affect water and sediment transport over large areas. Thus, proximity to an MPA could introduce higher hurdles to mitigating adverse impacts.

- **Offshore protection causes coastal erosion. Legal risk: moderate.**
  Gradual erosion over time is unlikely to support a successful takings claim based on current precedent. However, given the state of flux of takings law across the United States, such a lawsuit could be successful depending on the fact pattern (e.g. landowners prove that damage to their land amounted to permanent physical invasion or encroachment).

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### Strategy #4: Hard Armoring (Seawalls or Revetments)

<table>
<thead>
<tr>
<th>General Legal Risk</th>
<th>Moderate to High</th>
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<tbody>
<tr>
<td>Permits for hard armoring projects can face challenges from environmental NGOs, coastal residents, or the Coastal Commission, if these groups believe sufficient conditions are not in place to address impacts, such as erosion of adjacent property or loss of public beach. On the other hand, private property owners and property-rights NGOs may file complaints if permits are not granted, or if these groups believe that attached conditions are too onerous.</td>
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| Overview of Legal Context | Seawalls and revetments are typically constructed and maintained to protect private and public property. LCPs often outline permitting requirements and policies on seawalls. This removes some discretion held by the permitting entity (see the section on Land Use and Zoning below). The primary legal issues raised by these projects include takings, Coastal Act compliance, and CEQA compliance. Seawalls constructed by municipalities and the Coastal Commission are often |

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controversial, creating potentially high legal risk and administrative burden.

Granting or Refusing Seawall Permits

Private property owners may apply for a CDP to install a seawall if their property is threatened by erosion and sea level rise. Section 30235 of the Coastal Act provides that armorng “shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion . . . .” Notably, the term “existing structures” is not defined. This ambiguity has accounted for many of the lawsuits brought under the Coastal Act. “Danger” has been interpreted to mean that the property will be threatened in the next two or three storm cycles, absent action.

Meanwhile, Section 30253 of the Coastal Act states: “New development shall . . . (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Refusing to issue a CDP altogether could result in a suit alleging violation of the Coastal Act or a Takings claim. However, a takings claim for a permit refusal must be ripe to be tried, requiring a “clear, complete, and unambiguous showing that the agency has drawn the line, clearly and emphatically, as to the sole use to which [the property] may ever be put.”

If a plaintiff argues that a refusal to issue a permit denies him or her all economically beneficial use of his or her property, a possible defense for the local government is that the ban on armoring merely codifies background principles of law; namely, the public trust doctrine. The argument follows that, since the land is held in trust for the whole public, and not an individual landowner, allowing armoring would violate the general public duty. Similarly, if a plaintiff argues permit refusal causes a diminution in property value (i.e., takings claim), a

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110 Cal. Pub. Res. Code § 30600-01. Since 1990, under the policies outlined by LCPs, CDPs have had “no further armoring” provisions. “Under this approach, permits for new structures include a prohibition against future armoring (or no expansions to the existing armoring.” Ellen Hanak & Georgina Moreno, California Coastal Management with a Changing Climate 17, Pub. Pol. Inst. Of Cal. (2008).


112 It is debated whether “existing” means at the time of the Coastal Act’s passage in 1976, or existing in the present. Many scholars argue it means existing in 1976. AB 1129, introduced in the 2017 legislative session, would define “existing structures” to refer to those existing at the time of the Coastal Act passage in 1976.

113 See Caldwell & Segall, supra note 3, at 561.


potential defense is that the decision codifies background principles of law, like the public trust doctrine or nuisance, so there can be no taking.\textsuperscript{117}

**Granting Permit with Conditions**

Local governments can attach conditions to permit approvals;\textsuperscript{118} these conditions are often called exactions. Exactions can include an in-lieu sand mitigation fee, i.e. money paid to Coastal Commission in-lieu of placing sand on the beach as mitigation required under the Coastal Act. Other elements that may be required include establishing a monitoring program for sand transport or ensuring lateral public access.\textsuperscript{119} Conditions may require that the permittee waive rights under the Coastal Act to extend the seawall or other structure even if the seawall or structure faces future threats from sea level rise.\textsuperscript{120} The permit may also include an assumption-of-the-risk clause that indemnifies the permitting agency against third-party lawsuits in the possibility of a failure of the structure.\textsuperscript{121} The permit may be issued for a term of time not to exceed the expected life of the structure. Additionally, the permit may indicate that the Coastal Commission does not waive public rights now or in the future (such as when sea level rise changes boundaries subject to public trust doctrine). Exactions and conditions are subject to the Nollan-Dolan test for takings, requiring a nexus and rough proportionality to the reason for the exaction.

**Municipality-Constructed Seawalls**

For public entities constructing seawalls, the decision to build or not build a seawall brings its own risks. Refusing to build a seawall could reduce adjacent property value, which could result in legal challenges from landowners arguing that the diminution in value is a taking. Refusal could also threaten public infrastructure, like a railway line along the coast. This loss of property value or threat to infrastructure would be balanced against the public good and/or reasonable investment-backed expectations in a takings lawsuit. A countervailing public good might be sustaining a beach that is essential for long-term economic and environmental health.

Building a seawall requires compliance with the general provisions of the Coastal Act. Legal risk for a municipality could arise from NGOs arguing the seawall does not have a valid public trust purpose or violates the Coastal Act. It could also arise from adjacent property owners (through an inverse condemnation claim or a torts claim) whose land erodes more quickly than it would have without the seawall or whose land now has water pooling issues. Finally, if the seawall fails, property

\textsuperscript{117} See id.
\textsuperscript{120} See Reinforcing Existing Seawall, California Coastal Commission (2010), http://documents.coastal.ca.gov/reports/2010/7/F14a-7-2010.pdf.
\textsuperscript{121} Id.
owners who experience flooding could bring an inverse claim or a nuisance tort claim against the municipality.\footnote{122 See 113 Cal. App. 4th 998, 1003 (2003).}

**CEQA**

CEQA applies to all new seawalls and revetments. However, the construction of seawalls or revetments is exempt from CEQA in emergency situations, presenting a possible loophole related to both permitting and environmental review.\footnote{123 See Cal. Pub. Res. Code § 21080(b)(4). An emergency permit can be issued when “immediate action ... is required to protect life and public property from imminent danger,” or to repair public works. Cal. Pub. Res. Code § 30611.} AB 1129, introduced in 2017, aims to diminish the loophole by specifying “that any emergency permit issued under those provisions is a temporary authorization intended to allow the minimum amount of temporary development necessary to address the identified emergency.”\footnote{124 Assem. Bill 1129 Description, Alliance of Regional Collaboratives for Climate Adaptation (ARCCA), 2017 Legislation Tracking, available at http://arccacalifornia.org/legislative-tracking/; Assem. Bill 1129 (2017-2018), available at http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1129.}

There are many cases related to the construction of seawalls. The following demonstrate how legal risks have played out in the courts.

**Takings**

The first major issue is whether permit conditions constitute a taking, subject to \textit{Nollan-Dolan} analysis. These cases can be brought against a municipality during the development of a LCP, the municipality or Coastal Commission during permit review, or both.

For example, in \textit{Ocean Harbor House Homeowners Association v. California Coastal Commission}, the California Court of Appeal upheld a $5.3 million sand mitigation fee levied by the Commission for the construction of a seawall to protect the Homeowners’ subdivision.\footnote{125 163 Cal. App. 4th 215 (2008).} The Court found that the fee had a nexus and rough proportionality to the erosion impacts of the seawall. These takings cases rest on fact-specific inquiries—in most cases, each side could make sound arguments related to nexus and rough proportionality (or lack thereof).

If a permit is refused altogether, a landowner could file a takings claim for reduction of property value or loss of all value, depending on the facts at issue. A defense to such a takings claim could be based on the public trust doctrine as a background principle in property law. No cases in California have adjudicated this issue, but cases in other states have held that the public trust doctrine provides a legal justification for making permit decisions that may otherwise potentially

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\textsuperscript{122} See 113 Cal. App. 4th 998, 1003 (2003).
amount to a taking (for example, if sea level rise causes the land to be inundated).126

Coastal Act

The second major issue is compliance with the Coastal Act, and it is inexorably intertwined with the takings analysis. In Lynch v. CCC, the California Court of Appeal ruled that conditions on a bluff wall permit did not constitute an abuse of discretion by the Commission under the Coastal Act.127 The main condition at issue was a 20-year limit on the seawall permit, otherwise known as the “sunset clause”. The court found the sunset clause could be supported by several pieces of evidence, including that sea level rise would change shoreline protection needs over this 20-year time frame. As part of that finding, the court emphasized that the language of the Coastal Act is permissive, not exclusive.128 In other words, these sections of the Act must be read together—Sec. 30235’s provision stating seawalls “shall” be permitted in certain instances does not preclude the balancing of other factors, like the Coastal Act’s purposes of preserving marine resources and protecting public access.129 The case is being reviewed by the Supreme Court of California in May 2017.

In contrast, in August 2016, the Superior Court in Orange County overturned a permit condition waving rights to future shoreline protection for a mobile homeowner. However, in that case, unique factors were at play.130 Again, fact-specific inquiries determine the outcome. Property-rights advocates will look for a sympathetic plaintiff, plus a major loss of property value, while the Coastal Commission (and environmental groups) will discuss long-term, irreversible environmental impacts.

Discussion

126 See Esplanade Properties, LLC v. City of Seattle, 307 F.3d 978, 985 (9th Cir. 2002) (holding that a refusal to issue a permit to develop shoreline property was not a taking because the background principle of the public trust never provided the landowner that right in the first place); McQueen v. South Carolina Coastal Council, 354 S.C. 142, 149 (2003) (holding that a landowner had no right to construct bulkheads—a type of armoring—to allow development on wetlands since the public trust precluded it). See also Hecht, supra note 26.
128 Id. at 14.
129 The Act is also to 'be liberally construed to accomplish its purposes and objectives.' The 20-year duration was found not to constitute a taking because the time limit does not mean that a new permit would be accepted or rejected in the future. In Lynch, the dissent argued both that the condition violated Coastal Act Sec. 30235 (allowing seawalls for existing structures) and constituted a taking.
130 It is unclear what rights the mobile homeowner had in the first place—the existing revetment is owned and maintained by the non-profit entity that owns the mobile home park. Updating the seawall would likely require a new permit for the mobile home park as a whole, rather than this individual homeowner. Thus, the court says, “[i]t appears to be less closely related to the project at hand and instead related to a broader project which the Commission anticipates will become necessary in the future,” violating the Nollan-Dolan takings test and the Coastal Act. Capistrano Shores Property v. California Coastal Commission, available at http://www.pacificlegal.org/file/CapistranoShoresRuling.pdf.
When making seawall and revetment permitting decisions, the analysis hinges on two elements:

(1) Whether the Coastal Act allows seawalls for existing structures. Most courts have held that the purpose of the Coastal Act must be read broadly, and that there is no absolute right to a seawall being built to protect existing structures constructed *after* the passage of the Coastal Act. However, because the Supreme Court of California is currently reviewing this issue, their decision could result in substantial implications for future legal risk, depending on its scope. In addition, AB 1129 was introduced in the 2017 legislative session; if passed, it would define “existing structure” to mean existing at the time of the Coastal Act passage in 1976.

(2) Whether the permit decision or conditions can be closely tied to the public trust. This will involve an individualized determination based on the priorities outlined in the Coastal Act. Permit conditions are less likely to be challenged successfully if they are directly tied to the impacts from the individual seawall or revetment (to ensure nexus and rough proportionality), and also reference Coastal Act and public trust priorities like public access, recreation, and environmental protection. When a municipality denies a permit due to its public trust responsibilities, it can justify its decision on the grounds that reasonable, investment-backed expectations should include sea level rise. In litigation, a strong defense for a municipality is that the public trust doctrine is a background principle of property law that overrides the landowner’s interest in armoring.

Litigation could also arise under CEQA prior to seawall construction or expansion during the project review phase. Environmental impacts must be considered, focusing on localized erosion and flooding. Parties could bring inverse condemnation claims after seawall construction if damage is caused to private property, with a similar analysis as in the beach nourishment section.

- **Private property owners whose homes or businesses are endangered by sea-level rise challenge conditions placed on their permits. Legal risk: low to moderate depending on condition.**
  Permit conditions could constitute a taking if they do not pass the Nollan-Dolan takings test of nexus and rough proportionality. Some argue that Coastal Act Section 30235 allows, without qualification, seawalls to protect current structures. It is essential to make individualized determinations, ensuring that the conditions are tied to potential impacts and the priorities of the Coastal Act, including the public trust doctrine.

- **Refusing permit for private property owners. Legal risk: Moderate to High.**
  An aggrieved property owner could argue that he or she bears a disproportionately high burden of property loss relative to the impact of a seawall construction project on her property, and that refusing the permit
violates both the Coastal Act and the Takings Clause. The public trust provides a strong legal basis to defend against the claim.

- **Issuing permit without conditions. Legal risk: High.**
  A blanket issuance would placate property owners, but would likely violate Coastal Commission policy and result in challenges from environmental NGOs.

- **Municipality constructs seawall to protect public works, utilities, or services in imminent danger. Legal risk: low to moderate.**
  Coastal Act Section 30611 allows for the construction of emergency seawalls in some instances when there is imminent danger (this could apply to a rail line potentially threatened by the next storm cycle). CEQA would also not apply in this instance. However, if a seawall fails or causes flooding on an adjacent property, the municipality could face an inverse condemnation claim. The outcome would depend on the specific facts of the case.

- **Municipality constructs seawall to protect public works, utilities, or services in non-imminent danger. Legal risk: moderate to high.**
  Coastal Act Section 30611 would not apply if the danger was not imminent (i.e. in the next storm cycle). The permitting process would be burdensome, requiring a balancing of the public good and potential harms. If the seawall caused damage, it could be subject to a takings lawsuit. The outcome would depend on the specific facts of the case.

“Accommodation” Strategies

<table>
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**Overview of Legal Context**
Local Coastal Programs set out zoning and land use policies that determine how municipalities will implement the Coastal Act. LCPs are where the rubber meets the road in coastal planning—many of the strategies described above are predetermined by LCP guidelines. While undertaking a specific strategy like beach nourishment is subject to legal risk, the LCPs themselves (and decisions made under them, such as those related to armoring permits) are also subject to legal risk.

For example, if LCPs attempt to restrict private property development, they could be subject to litigation initiated by private property owners alleging a taking or violation of the Coastal Act. If LCPs do not adequately address sea level rise, they may be rejected or modified by the Coastal Commission and/or challenged by environmental groups as violating the Coastal Act or environmental statutes like CEQA.
Zoning and Land Use

Generally, LCPs provide broad authority to municipalities to incorporate zoning laws that place requirements on development occurring near the coasts. This includes establishing buffers/setbacks and hazard overlay districts. Setbacks and hazard overlays can consider erosion rates or other impacts of sea level rise. However, such setbacks or overlays could lower property values, raising the risk of takings litigation.

LCPs can also clarify how a municipality will construe its public trust responsibilities. One option is to expressly state that land which becomes subject to the public trust as a result of sea level rise reverts back to the state (a principle grounded in the common understanding of the Public Trust Doctrine\(^\text{131}\)). This is commonly referred to as a system of “rolling easements.”\(^\text{132}\) Establishing rolling easements could give local governments more leeway in how they implement sea level rise adaptation strategies, because they would have more power to implement changing zoning policies as the mean high tideline rises. However, while legal scholars argue on the behalf of rolling easements,\(^\text{133}\) no California court has ruled on whether they are a permissible application of the Public Trust Doctrine in the state.

An LCP could be threatened if the Coastal Commission does not accept its provisions, or accepts them with modifications.\(^\text{134}\) In addition, the Coastal Commission could recommend amendments to “accommodate uses of greater than local importance,”\(^\text{135}\) and it could unilaterally amend an LCP if the recommendations are rejected.\(^\text{136}\)

Private parties and public interest organizations could challenge decisions stemming from an LCP as violating CEQA or the Coastal Act. But if the LCP includes zoning and land use requirements deemed too stringent by property owners, it could be challenged as a taking or violation of the Coastal Act.

Permitting

LCPs establish a system of permitting based on the zoning requirements included in the plan. The zoning tools can serve as the basis for permit exactions for development activities that are issued a CDP. CDPs are required for most development. There are exemptions for improvements to existing single-family

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133 See id.
134 The Coastal Commission can reject or modify an LCP that does not meet the requirements of the Coastal Act or guidance issued under the Coastal Act.
residences that have not been found to involve a risk of adverse environmental impact and improvements to other structures—provided that there is no risk of adverse environmental impact or of an adverse effect on public access. Examples of possible permit exactions include "rebuilding restrictions, setback buffers, conditions requiring the dedication of lateral conservation easements, impact fees, flood protection requirements, land use restrictions, ‘no further armoring’ conditions, and structure removal requirements. Such exactions could be challenged as a regulatory taking subject to the Nollan-Dolan analysis.

However, agencies do not possess complete discretion in issuing permits. For example, permits cannot be granted without making requisite findings. Required findings depend on the area at issue (for example, only resource-dependent uses are allowed in environmentally sensitive habitat areas).

Notably, no CDP is required to rebuild a property destroyed by disaster. LCPs that attempt to clarify this provision for a future in which coastal areas are impacted by sea level rise could face takings litigation.

While LCPs grant municipalities broad authority to adapt to sea level rise, case law demonstrates the legal risk of disrupting land use.

**Preventing or Reducing Armoring**

In 2014, the City of Solana Beach released a land use plan that sought “to minimize and mitigate impacts from bluff retention devices, provide the city with the ability to reexamine the effects of the structures periodically, and limit the construction of new structures.” The Beach and Bluff Conservancy (BBC) (among others) challenged the LCP. Its claim was based on three main legal theories:

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137 Among other things, such improvements do not qualify for the exemption if they are “on a beach, in a wetland, seaward of the mean high tide line, in an environmentally sensitive habitat area, in an area designated as highly scenic in a certified land use plan, or within 50 feet of the edge of a coastal bluff.” Cal. Code Regs. tit. 14, div. 5.5, § 13250. Any development activities in this area are likely to need a CDP.


139 Herzog & Hecht, supra note 2, at 32.


142 For example, an LCP could state that seasonal flooding that will become more common with sea level rise does not constitute a disaster under this provision.

143 Surfrider Response Brief, at para. 12 (on file with author). Policy 4.22 in the land use plan states that “[n]o bluff retention device shall be allowed for the sole purpose of protecting an accessory structure.” Policy 4.55 states “All permits for bluff retention devices shall expire 20 years after approval of the [CDP],” requiring a new permit based on changing conditions, including sea level rise. Policy 4.40 requires an owner to pay fees as “mitigation for the impacts of all bluff retention devices which consists of the payment of Sand Mitigation Fees and Public Recreation Fees to the City or other assessing agency.” Policy 4.19 requires all new development and bluff-top redevelopment to include a deed of restriction on new armoring structures under Coastal Act Sec. 30235. Finally, Policy 2.60 allows permitted or private beach stairways constructed before the Coastal Act to be maintained, but not expanded in size or function, and provides for the phasing out of private beach access ways.

144 Represented by conservative non-profit the Pacific Legal Foundation
First, the plaintiffs argued that the LCP contravened the language of Coastal Act Sec. 30235, which states “‘[r]evetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required . . . to protect existing structures ... in danger of erosion.” The BBC argued that the LCP’s provision preventing bluff retention devices to protect “accessory structure[s]” circumvented language of Sec. 30235 protecting existing structures. In addition, the BBC claimed that several other provisions in the LCP also violated Sec. 30235 (including permit exactions), which they stated “unqualifiedly mandates the issuance of a permit.”

Second, the BBC argued that requiring landowners to sign a deed of restriction on new armoring structures violated the Nollan-Dolan test. The requirement constituted a taking, the plaintiffs said, because the agency made no individualized determination of nexus and rough proportionality.

Third, the BBC argued that the provision of the LCP phasing out private beach access ways violated Coastal Act Sec. 30610, which states that “no coastal development permit shall be required” for “[i]mprovements to any structure.” In December 2016, the Superior Court in San Diego issued a ruling that upheld some parts of the LCP, but invalidated others, based mostly on fact-specific inquiries.

These arguments get at the crux of much of the litigation centered on LCPs. Some property owners and property-rights organizations read into the Coastal Act a nearly unqualified mandate that municipalities issue armoring and development permits for all structures. Meanwhile, many legal scholars and environmental groups argue that municipalities have substantial discretion. Municipalities best protect themselves from risk if their permitting decisions are guided by scientific determinations on vulnerability assessments, and an explicit discussion of how the policies are supported by the public trust doctrine.

Zoning and Land Use

Municipalities retain broad discretion to regulate zoning in environmentally sensitive habitat areas, establish setbacks and overlays, and to generally
establish a comprehensive zoning scheme. LCP provisions are reviewed by courts for an abuse of discretion, so it is important that they closely relate to the goals of the Coastal Act and the principles of the public trust doctrine, without directly contravening any statutory provisions. In addition, any setback or overlay district could face a takings lawsuit as a regulatory taking, meaning that courts will balance the public good against economic impact and any reasonable investment-backed expectations.

Carrying Out Public Trust Responsibilities

While California has not established a rolling easement policy, a series of cases from North Carolina demonstrate potential outcomes of a municipality attempting to enforce its public trust responsibilities on property that becomes trust land due to sea level rise. After a severe storm event triggered substantial erosion in 2009, the Town of Nags Head sought to remove houses that were now on public trust property.\textsuperscript{150} The Town was unsuccessful, and ultimately settled with the property owners. Other cases with different facts—including one in the Ninth Circuit—came to a different conclusion, finding that zoning and permitting actions were merely carrying out public trust responsibilities.\textsuperscript{151} In the Ninth Circuit case, a refusal to issue a permit to develop shoreline property was not a taking, because the background principle of the public trust never provided the landowner that right in the first place.\textsuperscript{152} In sum, the application of the law to different fact patterns is not settled, though the public trust does move with the rising seas,\textsuperscript{153} and the public trust is a background principle of law.

Summary

Municipalities have broad discretion in developing LCPs. However, certain proactive policies to adapt to sea level rise seem somewhat likely to face lawsuits if they curtail property rights. The Lynch case, currently under review by the California Supreme Court, will provide additional information about what is and is not permissible when it is decided. In the meantime, LCPs minimize risk when they connect science-based policies to Coastal Act goals and public trust principles.

- Triggered setbacks or other policies short of removal tied to erosion rates. Legal risk: low.
  Establishing a trigger is likely not an action that is “ripe” to be tried. Since the trigger has not occurred, no harm has occurred. Theoretically, a

\textsuperscript{150} See Sansotta v. Town of Nags Head, 724 F.3d 533, 544 n.16 (4th Cir. 2013); Town of Nags Head v. Toloczko, No. 2:11–CV–1–D, 2014 WL 4219516, at *1 (E.D.N.C. Aug. 18, 2014); Town of Nags Head v. Cherry, Inc., 723 S.E.2d 156, 162–63 (N.C. Ct. App. 2012). Nags Head attempted to remove the houses based on an ordinance passed in 1988 that declared any property that is on public trust land as a result of erosion constitutes a nuisance.

\textsuperscript{151} See Esplanade Properties, LLC v. City of Seattle, 307 F.3d 978, 985 (9th Cir. 2002); McQueen v. South Carolina Coastal Council, 354 S.C. 142, 149 (2003) (holding that a landowner had no right to construct bulkheads—a type of armoring—to allow development on wetlands since the public trust precluded it).

\textsuperscript{152} See Esplanade Properties, 307 F.3d at 985.

\textsuperscript{153} United States v. Milner, 583 F.3d 1174.
property owner could argue that the mere presence of a trigger causes a partial diminution in property value, constituting a taking. However, that argument would likely fail since sea level rise adaptation is a public good that applies generally. In addition, triggers could make municipalities less vulnerable to future takings lawsuits by establishing reasonable investment-backed expectations for property owners based on sea level rise.

- **Trigger policy tied to removal. Legal risk: moderate-high.**
  Triggers tied to removal requirements could be at greater risk due to the extent of the property value at issue. While the law is currently unsettled, a property owner could argue that such a trigger reduces property values, counter to reasonable investment-backed expectations.

- **LCP requirement forbidding construction of seawalls. Legal risk: high for pre-1976 structures, moderate-high for structures built post-1976.**
  The debate about the meaning of “existing structures” has yet to be resolved. Forbidding armoring will likely subject a municipality to legal risk until the California Supreme Court releases its decision in the Lynch case (or legislation is passed clarifying the meaning of the phrase).

- **No new armoring provisions in CDPs. Legal risk: low.**
  Since the 1980s, many CDPs have included these conditions, and they are unlikely to face a credible legal challenge.

- **Lateral conservation easements in CDPs. Legal risk: low to moderate.**
  The Public Trust Doctrine and public access priorities of the Coastal Act provide support for easements. However, an individualized determination must be made that ties the easement conditions to the proposed development.

- **Removal/abandonment requirements for properties subject to sea level rise. Legal risk: high.**
  While the Public Trust Doctrine theoretically provides a hook for removal requirements as a background principle of law, such requirements would likely be subject to litigation, since they involve an important property interest. The outcome would depend on the specific facts of the case. Legal risk would be reduced if there were fair compensation, though that would raise financial issues in highly developed areas.

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154 See generally Hecht, supra note 26 (discussing application of public trust and nuisance as background principles of law that is important for sea level rise adaptation).
Liability for Failing to Take Action

Another question that may arise is whether local governments may be liable for failing to act in the face of climate change (e.g. failing to use some of the adaptation strategies we identified above to adapt to sea level rise). The answer to that question will largely depend on the facts at issue. Below we lay out three potential scenarios, and outline some general principles regarding a local government’s liability for failing to act.

**SCENARIO 1:** A local government fails to act, leading to flooding of private homes and property. Would the local government be liable for the damage?

**SHORT ANSWER:** Under current law, it is unlikely that a local government’s failure to act in and of itself will give rise to takings liability. It is important to keep in mind, however, that the law continues to evolve. In addition, by failing to adapt local governments may be more vulnerable to other takings claims (e.g. where a public improvement like a levee damages private property, which may occur more frequently with climate change).

There are several different legal theories on which a private property owner could sue a local government. These include takings and various tort theories (e.g. negligence).

**A. Takings**

We consider a takings claim first. Under Article 1, section 19 of the California Constitution, “[p]rivate property may be taken or damaged for a public use and only when just compensation...has first been paid to...the owner.” As courts have noted, “‘[t]he decisive consideration is whether the owner of the damaged property if uncompensated would contribute more than his proper share to the public undertaking.’”

We are not aware of any California cases that have found a local government liable under takings law for failing to act in the face of climate change. As a more general matter, it is unclear whether a local government’s failure to act – in the climate change context or otherwise – could give rise to a taking. As one commentator has noted: “Generally, failure to act cannot be the basis of a taking claim.”

While local governments may not be liable under current law, it is important to keep in mind that the law continues to evolve. Indeed, some commentators have noted that, as the law develops, local

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governments may be liable for damages to private property under the takings clause. This would, however, be a significant departure from current case law.

Regardless of whether a local government may be found liable under takings law for failure to act, local governments should keep in mind that they may be vulnerable to other takings lawsuits if they fail to adapt. For example, local governments may be liable where public improvements (like levees) damage private property, which will likely become more common as sea level continues to rise. As a general rule, “any actual physical injury to real property proximately caused by [a public] improvement as deliberately designed and constructed is compensable under [the takings clause] whether foreseeable or not.” Considering a few different aspects of this rule:

- **Liability Standard**: this is a strict liability standard, which means local governments can be found liable whether or not they are at fault (i.e. the plaintiff only needs to show that her injury was caused by the public improvement to recover damages).

- **Causation**: to be liable, the damage must have been “proximately caused by [a public] improvement...” This has been interpreted to mean that “there must be...’a substantial cause-and-effect relationship [between the public improvement and the damages] excluding the probability that other forces alone produced the injury.” For example, in the context of a flood control project:

  Where independently generated forces not induced by the public flood control improvement – such as a rain storm – contribute to the injury, proximate cause is established where the public improvement constitutes a substantial concurring cause of the injury, i.e. where the injury occurred in substantial part because the improvement failed to function as it was intended. The public improvement would cease to be a substantial contributing factor, however, where it could be shown that the damage would have occurred even if the project had operated perfectly, i.e., where the storm exceeded the project’s design capacity.

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157 For example, in her article “Potential Liability of Governments for Failure to Prepare for Climate Change,” J. Klein notes: “The argument for using the Takings Clause to impose an affirmative duty to protect private property, at least in cases where the government’s past actions create vulnerabilities to natural disaster risk, is emerging.” Sabin Center for Climate Change Law, 27 (2015), available at columbiaclimatelaw.com/files/2016/06/Klein-2015-08-Liability-US-Gov-Failure-to-Prep-Climate-Change.pdf.

158 As noted in Potential Liability, “[t]hat the government was held liable for inadequately preparing federally-constructed and maintained infrastructure for severe weather events in Saint Bernard Parish is significant in light of the increasing risk of such events due to climate change.” id. at 25.


160 The court explained the strict liability standard in Arreola v. County of Monterey, 99 Cal. App. 4th 722, 738 (2002) as follows: “The only limits to the claim [are] that (1) the injuries must be physical injuries of real property, and (2) the injuries must have been proximately caused by the public improvement as deliberately constructed and planned.”


162 Id. at 559-60 (emphasis in original).
In the *Belair* case, the levee was found to be “a substantial concurring cause of the damages” since, among other things, “the maximum flow in the channel at the time of the breach was” below the levee’s design capacity.  

**Maintenance of Public Improvements**: the general rule has also been applied to maintenance of a public improvement (not just design and construction). For example, in the *Arreola* case, the court stated that maintenance can be the basis for a takings claim “so long as it is the [public] entity’s deliberate act to undertake the particular plan or manner of maintenance.” The court went on to state that “it is enough to show that the entity was aware of the risk posed by its public improvement and deliberately chose a course of action – or inaction – in the face of that known risk.” In that case, the court found that the plan was the “failure to clear the...channel...for 20 years” in spite of known risks.

Court have noted some exceptions to the strict liability standard, instead applying a *reasonableness standard*. In these circumstances, a local government will only be held liable “if its design, construction, or maintenance of a public improvement poses an unreasonable risk of harm to the plaintiffs’ property, and the unreasonable aspect of the improvement is a substantial cause of damage.” In deciding reasonableness, courts look to a number of factors:

1. [t]he overall public purpose being served by the improvement project; 2. the degree to which the plaintiff’s loss is offset by reciprocal benefits; 3. the availability to the public entity of feasible alternatives with lower risks; 4. the severity of the plaintiff’s damage in relation to risk-bearing capabilities; 5. the extent to which damage of the kind the plaintiff sustained is generally considered as a normal risk of land ownership; and 6. the degree to which similar damage is distributed at large over other beneficiaries of the project or is peculiar only to the plaintiff.

One context in which the reasonableness standard has been applied is cases involving **flood control projects**. This includes:

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163 *Id.* at 560. Note that at least one court has refused to apply a “bright-line rule” in regards to design capacity. *Arreola v. County of Monterey*, 99 Cal.App.4th 722, 749 (2002). The court noted: “To the extent that the public project contributes to the injury, then it remains a concurring cause. Like any other determination of causation, it must be made on the facts of each case.” *Id.*

164 *See Arreola*, 99 Cal. App. 4th at 742 ("A public entity’s maintenance of a public improvement constitutes the constitutionally required public use so long as it is the entity’s deliberate act to undertake the particular plan or manner of maintenance"); *see also* McMahan’s of Santa Monica v. City of Santa Monica, 146 Cal. App. 3d 683, 696 (1983) ("The concept of ‘maintenance’ and ‘construction’ are synonymous for purposes of interpreting article 1, section 19," citing Bauer v. County of Ventura, 45 Cal.2d 276, 285 (1955)), disapproved on other grounds, Bunch v. Coachella Valley Water Dist., 15 Cal.4th 432 (1997).

165 *Arreola*, 742.

166 *Id.* at 744.

167 *Id.* at 746-7.

168 *Id.* at 739 (emphasis added).

169 *Arreola* at 739, quoting Locklin v. City of Lafayette, 7 Cal. 4th 327, 368-9 (1994).
• **Levees:** for example, in *Belair* the reasonableness standard was applied where a levee “fail[ed] to function as intended, and properties historically subject to flooding [were] damaged as a proximate result thereof.”\(^{170}\)

• **Storm Drain System:** in *Biron*, the court applied the reasonableness standard, finding the storm drain system to be “a method of flood control that was designed to [among other things]...protect property, including plaintiffs’ property, against potential flooding.”\(^{171}\)

While it will be more difficult for plaintiffs to succeed in actions where a reasonableness standard is applied, it is important to keep in mind that (1) **application of this standard does not mean local governments will not be found liable for a takings** (e.g., in *Paterno*, the court found that the plaintiff’s “damages were directly caused by an unreasonable [s]tate plan which resulted in the failure of the [levee] and the [s]tate [was] liable to pay for [plaintiff’s] damages”);\(^{172}\) and (2) **this standard will not be applied in all actions involving a public improvement** (e.g., in *Arreola*, the reasonableness standard was not applied where, among other things, the highway “created a risk to which [the damaged] properties would not have been [otherwise] subject”).\(^{173}\)

### B. **Torts**

A private property owner could also sue a local government based on various tort theories, including negligence, trespass, and nuisance. We are not aware of any California cases that have found that a government’s failure to act in the face of climate change gives rise to tort liability. We nonetheless highlight a few general issues related to these types of lawsuits below. Note that this is not intended to be a detailed or comprehensive review of these issues.

To start, a private property owner must satisfy certain procedural requirements before a lawsuit can move forward. With some exceptions, “all claims for money or damages against local public entities” must meet the requirements set out in the California Government Claims Act.\(^{174}\) These include submitting a claim:

- With the required information;
- To the appropriate representative of the local public entity; and

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\(^{170}\) *Belair*, 47 Cal.3d 550, 567.

\(^{171}\) *Biron v. City of Redding*, 225 Cal. App. 4th 1264, 1272-76 (2014) (note that the court applied the standard even though the property was not subject to historical flooding).

\(^{172}\) *Paterno*, 113 Cal. App. 4th at 1003.


• Within the time frame set out in the Act.\textsuperscript{175}

In general, a private property owner will not be able to bring a lawsuit “for money or damages… against a public entity …until a written claim…[(1)] has been presented to the public entity[,] and [(2)] has been acted upon by the board, or has been deemed to have been rejected by the board.”\textsuperscript{176}

It is also important to keep in mind that a public entity will not be subject to liability unless a statute indicates otherwise.\textsuperscript{177} The Government Claims Act sets out some of the circumstances where a public entity may be liable. This includes liability for its employees’ acts and omissions.\textsuperscript{178} As noted in a Staff Memorandum of the California Law Revision Commission, “The actions of a public employee are the greatest source of liability for public entities.”\textsuperscript{179} Another circumstance where a public entity may be liable is when it “is under a mandatory duty...”\textsuperscript{180}

Another issue to keep in mind is that a public entity and its employees may be immune from liability in certain circumstances. The Government Claims Act sets out some of these circumstances (e.g., design immunity, discretionary act immunity).\textsuperscript{181} This may prove to be “a significant hurdle” in any lawsuit a private property owner brings. As one commentator noted in addressing a government’s potential liability for negligence for failing to act in the face of climate change, “[o]vercoming the immunity from suit governments often enjoy presents a significant hurdle in such cases.”\textsuperscript{182}

\begin{footnotes}
\footnote{See Cal. Gov. Code §§ 910-915.4; see also Government Tort Claim Act, 3-4.\textsuperscript{175}}

\footnote{Cal. Gov. Code § 945.4. Note that, for a “local public entity,” the term “Board” is defined as “the governing body of the local public entity.” Id. at § 940.2(a); see also Government Tort Claim Act, 5-6.\textsuperscript{176}}

\footnote{Specifically, the Government Claims Act indicates that “[e]xcept as otherwise provided by statute[,] [a] public entity is not liable for an injury, whether such injury arises out of an act or omission of the public entity or a public employee or any other person.” Cal. Gov. Code, § 815(a). Note that the term “public entity” includes cities, public authorities, and public agencies, among others. See Cal. Gov. Code, §811.2.\textsuperscript{177}}

\footnote{Section 815.2(a) provides that “[a] public entity is liable for injury proximately caused by an act or omission of an employee of the public entity within the scope of his employment if the act or omission would, apart from this section, have given rise to a cause of action against that employee or his personal representative.” Note that there are certain limits to this liability. For example, “[e]xcept as otherwise provided by statute, a public entity is not liable for an injury resulting from an act or omission of an employee of the public entity where the employee is immune from liability.” Cal. Gov. Code, § 815.2(b).\textsuperscript{178}}

\footnote{C. Dole, Tort Liability and Immunity Under the Government Claims Act, Cal. Law Revision Com. Staff Memorandum 2010-6, 10 (Feb. 11, 2010) available at www.clrc.ca.gov/pub/2010/MM10-06.pdf.\textsuperscript{179}}

\footnote{Cal. Gov Code § 815.6 (“Where a public entity is under a mandatory duty imposed by an enactment that is designed to protect against the risk of a particular kind of injury, the public entity is liable for an injury of that kind proximately caused by its failure to discharge the duty unless the public entity establishes that it exercised reasonable diligence to discharge the duty”).\textsuperscript{180}}

\footnote{See Cal. Gov. Code §§ 830.6, 820.2.\textsuperscript{181}}

\footnote{Potential Liability of Governments, at 4. Note that this paper was not focused specifically on California law.\textsuperscript{182}}
\end{footnotes}
SCENARIO 2: In the face of climate change, a city’s stormwater drainage system can no longer keep up with the stormwater, leading to flooding of private property. Would the city be liable for the damage?

SHORT ANSWER: To the extent adaptation measures would be considered an upgrade to, as opposed to maintenance of, the current system, it is unlikely a local government would be found liable for a takings claim.

This scenario is similar to that described in Scenario 1: a public improvement (here, a stormwater drainage system) damages private property. A similar analysis as described above would therefore apply. For example, in regards to a takings claim, a question of causation may arise –was the property damage “proximately caused by [the stormwater drainage system]...”? The answer to that question may turn on whether the stormwater drainage system’s design capacity was exceeded.183

But this leaves open another question: could a local government be liable for failing to adapt its stormwater drainage system to the impacts of climate change? While we have found no California cases that have addressed this issue, takings cases we found suggest that, to the extent adaptation measures are considered an upgrade to the current system, local governments are unlikely to be liable.184

A question remains, however, as to whether these measures could be considered maintenance of the current system. One case that distinguishes between an upgrade and maintenance of a public improvement is the Paterno case. In that case, a property owner sued the government for inverse liability for damages related to the collapse of a levee. After determining “that an unreasonable [s]tate plan caused [the property owner’s] damages and that he [was] entitled to recover therefor,” the court went on to “clarify” an earlier decision, which addressed “impermissible ‘upgrade’ liability theory.”185 The court made clear that:

Imposing liability for the failure to redesign levees and dams to provide greater levels of protection would in effect allow the courts to usurp executive functions and would ultimately deter the construction of flood control projects.

See, e.g., Biron v. City of Redding, 225 Cal. App. 4th 1264, 1278 (2014) (“We agree that plaintiffs failed to prove the storm drainage system was a substantial cause of their damage because the system did not fail, it was simply overwhelmed by the amount of water the storm deposited into the system”).

See, e.g., Paterno v. State, 113 Cal. App. 4th 998, 1003 (2003) (in takings case, court noted that “[a] public entity cannot be held liable for failing to upgrade a flood control system to provide additional protection”); see also Pacific Shores Prop. Owners Ass’n v. Dpt. Fish & Wildlife, 244 Cal. App. 4th 12, 49 (in takings case, court noted that “[b]y our conclusion, we do not hold the government has a duty to provide flood control or to do so at any particular level”).

Paterno, 113 Cal. App. 4th at 1031.
But the court was also clear that not all curative measures constitute an upgrade.\textsuperscript{186} Indeed, as the court explained: “[w]e did not mean an entity can ignore evidence the improvement does not actually meet design standards and poses a risk of failure, then seek refuge in the defense that any cures after the date of construction would be upgrades.”\textsuperscript{187}

Based on the facts of the case, the court concluded that, while “[a] public entity cannot be held liable for failing to upgrade a flood control system to provide additional protection,” the “[u]se of [feasible cures] would not have been an upgrade, but would have ensured the planned flood control capacity was achieved.”\textsuperscript{188}

Could this case be applicable to the sea level rise context? One commentator has described the different ways in which sea level rise could lead to increased flooding of stormwater systems:

First, a higher sea level may cause high tides to back up through the stormwater system, causing flooding in the very areas in which the system is to drain. Second, [sea level rise] may not directly flood the land but it may cause previously dry drainage infrastructure to fill with saltwater, meaning that the affected volume of stormwater infrastructure is not available for the immediate storage of stormwater. A third related, and less appreciated, impact is that higher sea levels can cause a system to drain at increasingly slower rates. The system drains less efficiently because elevated sea levels reduce the vertical drop in the stormwater system, reducing the speed at which water travels through the system.\textsuperscript{189}

This means that flooding may occur even if the storm water system’s design capacity has not been exceeded.

It is therefore possible that a court could find that adaptation of a stormwater drainage system is not an upgrade, but is required to ensure the system’s design capacity is achieved. That said, it is important to note that, in the \textit{Paterno} case, “the initial levee construction was abysmal and that feasible technology existed in the 1930’s and 1940’s which, if implemented, would have brought the levee within engineering standards and averted the failure.”\textsuperscript{190} These facts, along with others in the case, could distinguish the case in any future lawsuit.

\textsuperscript{186} See \textit{Paterno}, 113 Cal. App. 4th at 1032 (“Taken to its end, this would mean that once a public work was built, no inverse liability could be predicated on a claim that it was poorly designed or built, and any curative measure would be an upgrade. That would contravene precedent”).
\textsuperscript{187} \textit{Paterno}, 113 Cal. App. 4th at 1032. The court made this statement in the context of addressing the determination of reasonableness.
\textsuperscript{188} \textit{Id.}, at 1003.
\textsuperscript{189} T. Ruppert & C. Grimm, \textit{Drowning in Place: Local Government Costs and Liabilities for Flooding Due to Sea-level Rise}, 87 \textit{The Florida Bar J.} 29 (Nov. 2013).
\textsuperscript{190} 113 Cal. App. 4th at 1014.
SCENARIO 3: The government has negotiated easements with private property owners for public access to the beach. Due to sea level rise, the easements become submerged. What happens to the easements?

SHORT ANSWER: The cases suggest that the easements will not “migrate” with the land, but will be lost to the sea. Note that the question addressed in this scenario is different from the discussion above related to the migration of public trust lands inland as sea level rises. This scenario involves easements on private property (i.e. the government has negotiated an easement with a private property owner for an easement over that owner’s land so that the public can access public trust resources).

The central issue is what happens to these easements: are they swallowed by the sea? Or, do they “migrate” with the land? While we have not found any California cases that have addressed this issue, the California cases we have found suggest that these easements would not “migrate” with the land. Note that the question addressed in this scenario is different from the discussion above related to the migration of public trust lands inland as sea level rises. This scenario involves easements on private property (i.e. the government has negotiated an easement with a private property owner for an easement over that owner’s land so that the public can access public trust resources).

One commentator has addressed the effect of sea level rise on negotiated easements, identifying two different scenarios:191

- **Entire property is submerged**: the easement would be lost in this scenario since an “easement conveyed by the owner of one parcel cannot migrate to an inland parcel.”192

- **Part of the property is submerged**: the result is more “ambiguous” in this scenario and “depends on state-specific law and site-specific facts.” The commentator goes on to note: “[t]here is no clear rule about whether existing public easements migrate inland within a given parcel of land.” Nonetheless, “[i]f the normal rule for easements applies, then the inland boundaries probably do not move inland.”193

The California cases we found suggest that a negotiated easement would not “migrate inland within a given parcel of land.”194 One example is the Vestal case.195 In that case, “defendants, without plaintiff’s consent, constructed on plaintiff’s land…[a] ditch on a line different from, and from one to twenty feet distant from, [a] flume line,” over which they held an easement. The court noted:

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192 Id.
193 Id.
194 Note that we were unable to find any California cases that involved easements that allowed the public to access public trust resources; a court may treat these types of easements differently.
195 147 Cal. 715 (1905).
It is elementary that the location of an easement of this character cannot be changed by either party without the other’s consent...The granting of a right over one portion of a person’s land, gives the grantee no right over any other portion.\textsuperscript{196}

As such, “[i]t [was] entirely immaterial in this connection that the new line was only from one to twenty feet distant from the old line.”\textsuperscript{197} Nor does it matter, as a subsequent court found, if the change “would cause no harm to the owner or would actually benefit him.”\textsuperscript{198}

It is important to note that consent to relocation can be express or implied. For example, in the Red Mountain case, the court affirmed “the trial court’s finding that the parties impliedly consented to relocate [an] access easement...” One of the issues in that case was whether an easement had been relocated to a new road “after the ‘existing road’ referred to in the [agreement] was obliterated...” The court noted:

> Parties may change the location of an easement by mutual consent, which may be implied from use and acquiescence. When the parties consent to relocation, their “rights are not affected by the change, but attach to the new location.”\textsuperscript{199}

Here, there were several facts that showed implied consent, including that the grantees of the easement were “authorized...to use the new roadway immediately” and “continued their use of this new roadway for many years, unobstructed...”\textsuperscript{200}

It is also important to note that, even though the Vestal case suggests that consent is required even for minor changes in an easement’s location, other cases suggest that consent may only be required if the change is substantial. This was made clear in the Finn case, which “involve[d] a dispute over the construction of a bridge...”\textsuperscript{201} The court described some of the pertinent facts of the case as follows:

> The only way to get to [plaintiff’s] property is to use a road that crosses [defendant’s] property, over which [plaintiff] has an easement. In the middle of [defendant’s] property, however, the road crosses [a creek]. The only way to get across the creek is to ford it. Sometimes the water is too high in the creek to use the ford, and at those times there is no access to [plaintiff’s] property.\textsuperscript{202}

The deed granting the easement “said nothing about the manner by which the creek was to be crossed.” Plaintiff wanted “to build a bridge across the creek,”\textsuperscript{203} and one of the issues that arose was whether the plaintiff had the right to build the bridge at a particular location. Defendant argued there was no right since “the south approach to the bridge would be constructed about 60 feet to the east of where the existing dirt road abuts the creek at the existing wet ford. [Defendant] contend[ed] that without her

\textsuperscript{196} \textit{id.} at 718 (citation omitted).
\textsuperscript{197} \textit{id.} at 718.
\textsuperscript{198} Hannah v. Pogue, 23 Cal. 2d 849, 855 (1944).
\textsuperscript{200} \textit{id.}
\textsuperscript{201} No. C042810, 2004 WL 1510595, at *1 (Cal. Ct. App. 2004) (note that this is an unpublished case).
\textsuperscript{202} \textit{id.}
\textsuperscript{203} \textit{id.}
consent, [plaintiff] ha[d] no right to relocate the easement from the dirt road to another location on her property.”

The court disagreed. It started by noting that: “[u]nder California law, ‘[o]nce the location of an easement has been finally established, whether by express terms of the grant or by use and acquiescence, it cannot be substantially changed without the consent of both parties.’” The court then went on to affirm the trial court’s finding “that the road relocation required for construction of the [bridge] does not constitute a substantial change in the location of the easement and therefore does not require [defendant’s] permission.”

The court based its conclusion on a number of facts. These included that “the portion of the easement [plaintiff sought] to relocate...amount[ed] to little more than 1 percent of the total easement length,” and that “the exact location [by which the creek was crossed] varied as conditions in the creek changed.” The court also noted that it “[was] not a case where allowing the relocation ‘would make the burden imposed by the easement a matter of perpetual speculation and subject the servient owners to continual uncertainty as to their rights in the use and enjoyment of their land.’”

Based on the Finn case, it is arguable that a gradual inland relocation of an easement with sea level rise “does not constitute a substantial change in the location of the easement and therefore does not require [the property owners’] permission” to relocate. That said, the continuous relocation of the easement would arguably be “a matter of perpetual speculation and subject the [property owners] to continual uncertainty as to their rights in the use and enjoyment of their land.” This, and many of the facts in the Finn case, will likely distinguish the case from easement relocation in the sea level rise context.

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204 Id. at 15.
205 Id.
206 Id. at 17 (emphasis added). Compare with Youngstown Steel Products Co. of Cal. v. City of L.A., 38 Cal. 2d 407 (1952) (raising power lines from 51-1/2 to over 61 feet presumed to be substantial change).
207 Id. at 16.
208 Id. at 16.
209 Note also that the Finn case is an unpublished case.

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Conclusion

Sea level rise adaptation requires acting in the face of uncertainty. Part of that uncertainty derives from the impacts of sea level rise—it is difficult to know exactly when various actions are required to avoid substantially harming the public good. But perhaps even more of the uncertainty involves how to balance the environmental, economic, and legal implications of acting on behalf of the public good.

This report summarizes some of the legal considerations of sea level rise adaptation in San Diego. The most important takeaway is that legal risk is highly fact-specific. In many instances, there is no easy answer as to how much risk an action carries, or how that risk should be balanced against the risk of inaction. This report, rather than providing answers to site-specific questions, serves as a reference document for planners to understand why, when, and how legal risk may arise.

The sea is rising. With the rising tides comes the need for strategic adaptation. While legal risk can never be completely averted, it can be minimized by focusing on stakeholder buy-in before taking large-scale actions, combining the entire land use and planning toolkit with public outreach. Through long-term, strategic adaptation planning, the public good and private interests can be both achieved.