THE PUBLIC TRUST DOCTRINE:
A Guiding Principle for Governing California’s Coast Under Climate Change

PREPARED BY MEMBERS OF A WORKING GROUP ON CALIFORNIA’S PUBLIC TRUST DOCTRINE AND COASTAL LAND MANAGEMENT
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The Center for Ocean Solutions (COS) works to sustain the health of the oceans in the face of a changing climate, and in particular to harness the innovations of the data revolution to help meet that challenge. A center within Stanford University’s Woods Institute for the Environment, COS draws on a pool of scholars and experts across academic, governmental and non-governmental organizations to tackle interdisciplinary and multi-sectoral problems, bringing leading experts in marine science and policy together with decision-makers. To learn more, please visit centerforoceansolutions.org.

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California’s policymakers, coastal managers, and communities increasingly recognize that the inevitable collision of sea level rise with certain coastal development trends—what some have termed the “coastal squeeze”—threatens California’s coast. In addition to reducing the availability of highly valued coastal access and recreation areas, the coastal squeeze carries the potential to degrade, destroy, or privatize the state’s shoreline and tidelands and the economic, cultural, and ecological benefits they provide.

These important public values and benefits associated with our coast are protected by the public trust doctrine, a legal doctrine that reflects the supreme importance of public values, resources, and uses in California’s coastal tidelands and submerged lands. Under the public trust doctrine, California has a duty to protect and sustain its coastal tidelands and submerged lands for public purposes ranging from navigation and commerce to recreation and conservation, as well as the authority to defend the public’s interests when they are at risk.

The public trust doctrine can function as an important legal tool for adapting the use of California’s coastal lands to ongoing changes. California will find strong legal support—rooted in long-standing precedents and principles of property law—for considering the anticipated effects of sea level rise and other climate change impacts on public trust resources and interests. The doctrine also provides a framework for effective adaptation of public and private activities in vulnerable areas. Yet complex and sometimes conflicting interpretations of the doctrine have limited its application.

To provide a clear interpretation of the public trust doctrine’s potential role in climate change adaptation along California’s coast, the Center for Ocean Solutions convened a working group of public trust and coastal land use experts in October 2016. The working group members jointly authored the following consensus statement, which describes California’s duty and authority under the public trust doctrine and identifies opportunities for policymakers, coastal managers, and stakeholders to improve the governance and management of our coastal public trust resources and uses in light of sea level rise.

1 Although this document focuses on California’s public trust doctrine as it relates to coastal lands and waters, the doctrine applies to all submerged lands and navigable waters.
CONSENSUS STATEMENT On the Public Trust Doctrine, Sea Level Rise, and Coastal Land Use in California

Prepared by law and policy experts to provide information and guidance on a fundamental doctrine of California law and its implications for coastal land use decisions throughout the state in light of sea level rise. For comprehensive background on issues explored in this consensus statement, please refer to the accompanying background document.

1 California’s dynamic coastline is subject to natural changes as well as human influences, including sea level rise and coastal development. If not proactively and effectively managed, these changes and influences can impair public interests in the coast.

California’s coast and shoreline are constantly changing because of natural processes. Geological and oceanographic processes including waves, currents, storms, land subsidence, and uplift affect the contours of California’s coast, resulting in a constantly changing land-sea interface. While these processes and changes are common along all coasts, they are more prominent and intense in California than in many other areas.

Future change to the shoreline due to accelerating sea level rise will cause landward migration of beaches, bluffs, wetlands, and other coastal features in most parts of the California coast. The rate of sea level rise is increasing dramatically due to climate change and is projected to increase for the foreseeable future. In general, the anticipated vertical rise in sea level will cause gradual landward horizontal migration of the shoreline and may contribute to the loss or impairment of many existing coastal features to inundation or erosion.

If not proactively managed, coastal development may impede natural landward migration of these important coastal features and impair the public’s ability to enjoy the social and economic benefits provided by the coast. Man-made structures such as seawalls, roads, and other developments may occupy physical space that would otherwise be available for the migrating shoreline. Without proactive management, this is likely to impair many of the benefits that California receives from its coast, including tourism, access, and recreation opportunities; economically productive habitats and ecosystems; and natural protection from storms, floods, and other hazards.

2 The public trust doctrine requires California to protect the public’s interest in tidelands and submerged lands, including their use for navigation, commerce, fishing, public access, recreation, and conservation.

According to the California Supreme Court, the public trust doctrine includes California’s duty “to protect the people’s common heritage” in public trust resources, which include tidelands, submerged lands, and navigable waters, as well as the wildlife and natural resources associated with them. It also includes California’s obligation to exercise “continuous supervision and control” over public trust resources. Generally, to maintain consistency with the public trust doctrine, California must ensure that uses of public trust resources are consistent with public trust needs, have a public purpose or benefit, and are water-dependent.¹

¹ Uses that directly promote trust uses or that accommodate the public’s enjoyment of trust lands are also permitted. Merely increasing tax revenues is not a public purpose. Berkeley v. Superior Court, 26 Cal. 3d 515 (Cal. 1980).
California's obligations under the public trust doctrine apply to public decisionmakers that undertake, manage, or regulate activities that directly or indirectly affect public trust resources. The obligations extend, at a minimum, to state and local legislatures; to state and regional agencies including the State Lands Commission, San Francisco Bay Conservation and Development Commission, Coastal Commission, Department of Fish and Wildlife, Department of Transportation, Agricultural Districts, Department of Forestry and Fire Protection, State Water Resources Control Board, Regional Water Quality Control Boards, Coastal Conservancy, and Department of Parks and Recreation; and to cities, counties, ports, and special districts. The implications of the public trust doctrine in any specific case depend on the mission and mandate of the relevant decisionmaker, and on the type and location of the proposed use. State courts may review the actions of decisionmakers to ensure they have fulfilled their public trust obligations.

The public trust doctrine should guide interpretation and application of existing laws and regulations. Many constitutional provisions and statutes—such as the California Coastal Act and McAteer-Petris Act—implement and prioritize aspects of the public trust doctrine; however, they do not eliminate or preempt it. Decisionmakers should interpret and implement their legal obligations in light of the public trust doctrine and resolve any gaps or ambiguities in favor of public trust resources.

The public trust doctrine is a background principle of state property law. Thus, regulations of property that constitute an exercise of the public trust doctrine—including but not limited to regulations that prevent the creation of nuisances that adversely affect public trust resources—do not give rise to compensable “takings.” Because the public trust doctrine is rooted in sovereign land ownership, it constitutes a background principle of property law and establishes limitations on private property interests. The “takings clause” of the Fifth Amendment of the United States Constitution, which states that private property may not be taken for public use without just compensation, does not apply to regulations that are consistent with background principles of property law.

3 The public trust doctrine limits the ability of decisionmakers to dispose of public trust resources or impair their use for public trust purposes.

Decisionmakers may not relinquish their public trust obligations or sell or dispose of public trust lands, except as consistent with the purposes of the public trust doctrine. California’s legislature may authorize the conveyance of relatively small parcels of public trust lands to private interests only if the transfer furthers public trust purposes—or, in rare circumstances, if the lands are no longer useful for public trust purposes. Lands conveyed to private interests remain subject to a public trust easement unless the legislature’s intent to abandon the trust is clearly expressed or necessarily implied. A retained public trust easement provides the state with continuing authority to use or restrict the lands’ use for public trust purposes.

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2 Landowners do not have a right to create or maintain unreasonable interferences with the public’s interests in and uses of tidelands and submerged lands. In this regard there is considerable overlap between the public trust doctrine and the law of public nuisance, another background principle of the law.

Decisionmakers may not undertake or authorize uses of public trust lands that substantially impair or are inconsistent with public trust needs in those lands. Decisionmakers may only undertake or authorize a use of public trust lands after concluding that the use has direct public benefits, and is consistent with or does not significantly interfere with the public trust purposes for which those lands are held. Where multiple competing uses are consistent with public trust purposes, the state has broad discretion to balance them and may prefer one use over another.

Decisionmakers may not undertake or authorize uses of uplands without appropriate safeguards for nearby public trust resources and uses. Decisionmakers must minimize the foreseeable adverse effects of upland activities on public trust resources and uses, to the extent feasible. This includes the power to regulate and limit private upland activities.

4 The public trust doctrine requires decisionmakers to consider the effects of their actions on public trust resources and uses.

Decisionmakers must consider the immediate and foreseeable potential effects of their actions and decisions on public trust resources and uses and communicate their findings to the public. This obligation may, in appropriate circumstances, be satisfied as part of a decisionmaker’s environmental impact review or functionally equivalent process under the California Environmental Quality Act if the process provides sufficient evidence to support the decisionmaker’s specific analysis, consideration, and balancing of public trust resources and uses. This consideration should include anticipated future effects and cumulative effects, rather than viewing the effects of individual actions or decisions in isolation.

Decisionmakers must determine whether a proposed activity or use would substantially impair or be inconsistent with public trust needs in the area. In many cases, the legislature has prioritized appropriate trust uses for an area, such as commercial activities that facilitate or increase public access in highly developed urban areas, or conservation and public access in undeveloped open coast areas. However, whether a particular use is consistent with public trust needs often is a case- and location-specific analysis that must be undertaken by the relevant decisionmaker, in light of their legal authority.

Coordination among decisionmakers—especially when locating the shoreline property boundary—is essential to minimize conflict and avoid waste of resources. Because each state and local agency operates under different policies and sources of authority, they may at times disagree whether a particular use of tidelands is appropriate. Early coordination at all levels is necessary for decisionmakers to effectively protect and manage public trust resources and uses.

Decisionmakers may need to review past decisions in response to new evidence concerning effects on public trust resources and uses. No one can acquire a vested right to harm public trust resources and uses. California has a continuing duty to manage and protect public trust resources and uses, even as circumstances change. To fulfill this duty, decisionmakers may condition project approvals by providing for future re-evaluations of the approval based on new evidence. Under certain circumstances, where past decisions are found to substantially impair public trust needs, California has the power to revoke or amend the scope of previously granted rights.
The existing legal standards and technical methods for locating shoreline property boundaries are inadequate to deal with the dynamic environmental processes of the open coast, or with ongoing sea level rise. California should explore alternatives to these standards and methods in order to ensure protection of public trust resources and uses.

The current legal standard defining the shoreline property boundary is the ordinary high water mark, as located by the mean high tide line. The shoreline boundary between state-owned tidelands and privately- or publically-owned uplands in California is the ordinary high water mark. The current legal standard for defining and locating the ordinary high water mark—and thus the shoreline property boundary—is the mean high tide line, a standard first announced in the U.S. Supreme Court’s 1935 Borax decision.

Sea level rise will continue to shift the location of the shoreline property boundary landward in most parts of California’s coast. The mean high tide line is “ambulatory”: it moves to the extent that the shoreline naturally accretes or erodes and to the extent the plane of mean high water rises or falls. As sea level rises and the shoreline moves inland, the coastal property boundary will generally move inland as well.

Other effects of climate change cause episodic, large-scale changes to the coast—such as increased intensity of storms that contribute to rapid erosion and bluff failure—and will result in changes to the shoreline property boundary. The common law doctrine of avulsion—developed to address property disputes arising when rivers suddenly shifted their courses—has not been applied to such changes on California’s open coast and its future application would be inappropriate because large-scale changes to the shoreline are both natural and the norm.

Under certain circumstances, California may permanently “fix” the location of the legal shoreline boundary when in the public interest, but the placement of a physical structure does not itself “fix” the boundary. The State Lands Commission has authority to permanently fix the legal shoreline boundary by court order or formal agreement with the adjacent landowner. Additionally, state agencies and local tidelands trustees may authorize development of structures to prevent erosion, which may temporarily prevent the shoreline from migrating, when consistent with strict statutory requirements. Neither the legislature nor the courts have declared that such authorized structures permanently fix the legal shoreline property boundary, even if they are not subject to a time limit or other conditions for removal. Allowing such structures to fix the shoreline boundary in perpetuity to the detriment of the public would conflict with several well-established principles of law, including the ambulatory nature of the shoreline boundary, prohibitions on upland owners artificially moving the shoreline boundary to benefit themselves, and prohibitions on direct or indirect conveyance of public trust tidelands to private ownership. Thus, absent formal action by the State Lands Commission, actions to prevent erosion by the State, a local government, or a private landowner do not fix the shoreline boundary.4

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4 Because both the upland and tideland owner have a right to expansion of their property by erosion, accretion, or other natural causes, neither may permanently fix the boundary with an armoring structure. See United States v. Milner, 583 F.3d 1174 (9th Cir. 2009).
Structures that come to lie seaward of the shoreline property boundary will be on public trust tidelands and subject to the authority of the State Lands Commission. If a survey indicates that structures once located on uplands are subsequently located seaward of the mean high tide line, those structures will be located on state trust property and subject to the authority of the State Lands Commission. The Commission may charge rent for such structures, or require their removal, and has an ongoing duty to consider their consistency with the public trust.

The current legal standards and technical methods for locating the shoreline boundary are challenging to apply, create uncertainty around the location of the boundary as it exists from time to time, and can undermine public interests. The mean high tide line is located by 1) calculating an average of California’s twice-daily mean high water elevations over an 18.6-year period, and 2) surveying the precise location of the intersection between that average elevation and a particular point or stretch of the shoreline as it exists at the time of surveying. Application of this standard to California’s dynamic open coast is problematic for several reasons including: the lack of tidal measurement stations on all parts of California’s coast; disregard of wave run-up on the open coast, which was not a factor in the standard-setting Borax case; and erosion and accretion of the shore over daily to annual timescales. Application of this standard also fails to account for sea level rise due to the lack of a “rolling average” for calculating mean high tide, and the long periods between recalculation of mean high tide.

California can explore innovations to make these standards and methods for locating shoreline property boundaries more rational, flexible, and protective of public trust resources. Possible innovations include: establishing additional tide gauge stations along the coast to ensure boundary surveyors have access to accurate local data; requiring project proponents to finance multiple surveys over a considerable period of time to account for seasonal erosion and accretion, allowing decisionmakers to base decisions on the range of surveyed locations where the mean high tide has intersected the shore; and encouraging the National Oceanic and Atmospheric Administration to calculate a rolling average of mean high tide (e.g., to ensure the previous year is included in an annually updated average) that more accurately reflects current sea level and incorporates ongoing sea level rise. Even with these innovations, however, uncertainty will remain regarding ownership and jurisdiction issues associated with the dynamic shoreline boundary.

The public trust doctrine obligates California to proactively manage and protect public trust resources and uses in light of sea level rise and upland land-use practices. California must consider how sea level rise is likely to affect public trust resources and uses when evaluating proposed or existing activities and to ensure that public trust resources and uses are not damaged or destroyed. California is aware of the threats that sea level rise and certain types

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5 Wave run-up, or uprush or swash, refer to water carried by momentum up onto a beach past the level water would reach in the absence of waves. In the Borax case, the court was determining the tideland boundary of an island in a bay protected by a breakwater, thus wave run-up was likely minimal. Borax Consol., Ltd. v. Los Angeles, 296 U.S. 10 (1935). On the open coast, wave run-up can extend many feet beyond the mean high tide line.

6 Because the slope and width of California’s beaches vary throughout the year due to erosion and accretion, a static surveyed location of the boundary is not representative of where the boundary may be in a week, a month, or a year.

7 Prevailing practice in California uses mean high tide elevations calculated by the National Oceanic and Atmospheric Administration. The current published tidal epoch is based on calculations of the 18.6-year average of high tide elevations between the years 1983 and 2001. As a result, the legal location of the shoreline property boundary is currently calculated using sea level data that is between fifteen and thirty-four years old.
of coastal development pose to public trust resources and uses. To address these threats, decision-makers must consider and assert public interests in statewide policy making, project-level decision making, and long-term planning (e.g., creating or revising local coastal programs, local general plans, and other plans).

California can undertake a variety of sea level rise adaptation strategies that are consistent with the public trust doctrine. These include:

- Develop laws and policies that acknowledge the dynamic character of coastal property boundaries and avoid or minimize foreseeable threats to public trust resources and uses. Potentially valuable new state or local laws and policies could provide for rolling land use restrictions, revise zoning laws to phase out development in hazardous areas, or require boundary determinations and projections of future boundary movements when development is anticipated to encroach on public land or be located within flood zones.

- Encourage community-level land use and adaptation planning. Such efforts are most necessary in developed areas with difficult tradeoffs between the sense of place cherished by visitors and coastal residents, vested economic interests in coastal development and redevelopment, and the significant economic and cultural benefits of coastal access for all as protected by the public trust doctrine and California Constitution.

- Increase or improve coordination between relevant agencies to ensure effective protection and management of public trust resources and uses.

- Reject or place conditions on proposed developments or uses that will foreseeably cause harm to public trust resources and uses. Appropriate conditions may include measures such as setbacks, time restrictions, restrictions on future protective structures, payment of fees to mitigate effects on trust resources, or requirements for future removal if substantial impairment of public trust resources and uses arise.

- Establish procedures for periodic review and, if necessary, reconsider past decisions that affect public trust resources and uses in light of new knowledge.

- Ensure that coastal structures on tidelands are consistent with public trust needs. Where appropriate, require removal or charge rent for such structures. Clarify that such rules apply to structures that come to be located on public tidelands because of movement of the coastal property boundary, even if those structures were originally located on private land and lawfully permitted.

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8 A rolling land use restrictions is an “interest in land along the shore whose (landward) boundary migrates inland as the shore erodes.” James G. Titus, United States Environmental Protection Agency, Rolling Easements 163 (2010). The ambulatory nature of the public trust boundary aligns with this concept. Recognition of this concept in statute— premised on the public trust doctrine—would be an appropriate exercise of the state’s public trust authority. Rolling land use restrictions may also refer to a regulatory limitation on coastal upland property tied to the ambulatory public trust boundary.
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Consensus Statement on the Public Trust Doctrine, Sea Level Rise, and Coastal Land Use in California

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