

RISING SEA LEVEL AND RE: HOW SERIOUS IS ITS IMPACT ON CA'S COASTLINE?

DRIVEN BY GLOBAL CLIMATE CHANGE, LONG-TERM SEA LEVEL RISE PRESENTS SIGNIFICANT RISKS TO U.S. DEVELOPERS AND OWNERS OVER THE COMING DECADES. WITH FULL-SERVICE LAND USE AND REAL ESTATE DEVELOPMENT PRACTICE, COX, CASTLE & NICHOLSON PARTNER STANLEY LAMPORT TALKED TO CPE ABOUT THE IMPACT OF ACCELERATED SEA LEVEL RISE AND GLOBAL WARMING ON CALIFORNIA'S REAL ESTATE INDUSTRY

By Laura Calugar

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Millions of Americans live in areas at risk of [coastal flooding](#), and rising seas are seriously increasing the exposure of this growing

population to flooding during storms, seasonal tidal flooding and coastal erosion. Rising sea levels are also threatening the state's iconic beaches and infrastructure. The California Coastal Commission has been relying on the National Research Council's 2012 sea level rise projections in shaping its sea level rise policy and guidance. But how reliable are these numbers nowadays? And is California on the verge of a costly conflict between private property owners and authorities?



Stanley Lampport, partner at Cox, Castle & Nicholson

With more than 30 years of experience as a transactional land use lawyer and an extensive California Coastal Commission and California Coastal Act practice, [Cox, Castle & Nicholson](#) Partner Stanley Lampport talked to *Commercial Property Executive* about coastal zone legislation changes, following the 2017 California Coastal Law conference in Los Angeles.

For California, ice loss from Antarctica causes higher sea level rise than the global average. What's the worst-case scenario regarding sea levels along California's coastline?

Stanley Lampport: The Council has projected that most of the California coastline will experience sea level rise of between 2 and 12 inches by 2030, 5 and 24 inches by 2050 and 17 and 66 inches by 2100. However, the Commission is aware of more recent projections that are raising the possibility that global sea level rise could be significantly greater than the current Council projections for California. The wide range in the Council's projections reflects the uncertainty in the scientific community about how quickly sea levels will rise, but one should expect that regulatory agencies will give more weight to the higher end of the ranges, which represent the currently projected worst-case scenarios. Those scenarios are currently projected at a foot in the next 12 years, two feet in the next 32 years and more than five feet by the end of the century.



There are a number of consequences that would arise if the worst-case scenarios are realized. In the first instance, the sea level rise will affect the location of the mean high tide line, which

marks the boundary between state tidelands and private property. That boundary will migrate inland as sea level rises. In low-lying areas, a five-foot rise could extend inland an appreciable distance. There are several areas in Southern California where this is projected to occur.

The mean high tide line only captures where sea level ordinarily would be. It does not capture extraordinary high tides and tidal action driven by storms. In the worst-case scenario projections, the potential for significant inland flooding from large tidal events increases appreciably. The Coastal Commission has been using projections of flooding resulting from 55 inches of sea level rise (expected by the end of the century) and a 100-year storm in its planning. Based on that data, large populations in Los Angeles, Orange and San Diego Counties would be exposed to flooding resulting from the effects of sea level rise and storm tidal action. The largest impacted populations are in Orange County, with most of the impact occurring inland of the coastal zone.

The other projected effect is the acceleration of erosion as rising tidal forces reshape the coastline. Erosion is a concern for the private property owner, whether it is the erosion of sand on the beach or the retreat of a coastal bluff. In either case, property owners may not just lose the land that erodes, but the underlying title, too, as the mean high tide line extends inland with the rising sea level. The Coastal Commission's guidance expresses a strong preference for allowing the erosion to occur in order to create new beaches and sustain existing beaches. In many cases, this guidance pits the private property owner, whose interest is in protecting the property from erosion, against the state, whose interest is in allowing the erosion to occur. This tension becomes more acute in the worst-case scenario projections.



Sea level rise threatens hundreds of miles of roads, railways, airports, power plants, beaches and thousands of businesses and homes. How worrying is the current sea level rise and what are the projections for California?

Lampport: This is an issue that needs to be taken seriously. The prospect of having to move significant pieces of California's infrastructure inland of rising sea level and to construct new flood infrastructure over the next 80 years is daunting. Looking beyond just California, many parts of the world will lose significant land areas due to sea level rise. In the U.S, Florida stands to lose the most. The consequences would be considerable.

Even those who don't have faith in the projections need to take the issue seriously now. The Coastal Commission and other state agencies are actively planning for sea level rise using the current projections as a guide. The Commission's current guidance calls for coastal development to retreat inland over the next 80 years as a response to sea level rise. The implementation of that guidance has and will continue to result in the enactment of local land use controls that are likely to place a significant burden on the land owner. The cynic will be swept up in the regulatory restrictions along with the rest.

What actions should real estate owners or managers take now in order to prepare coastal communities and mitigate hazards? What is your advice for coastal property owners?

Lampport: The Commission has adopted a sea level rise guidance that emphasizes "planned retreat." One of the objectives in the guidance is to allow the mean high tide to move inland over time, in order to preserve beaches and public access to the beach. The guidance also calls for the removal of shoreline protection devices to protect private property, as existing structures reach the end of their life and are replaced. For the private property owner, the guidance can result in private land becoming state land as the mean high tide, which defines the boundary between state land and private land, moves inland. Replacement structures would be required to move inland on lots along the coast, but where there is insufficient area to relocate out of the tidal zone, there is a risk that some private property owners could lose their properties over time. A property owner who replaces more than 50 percent of an existing structure may be required to demolish the structure and rebuild further from the shoreline, where there may not be sufficient area to build to the same square footage.

The combination of sea level rise and the restrictive policies to address sea level rise will likely put the value of coastal real estate at risk over time. We have entered a time where coastal property owners will need to be proactive to protect their investments. Property owners along the coast will need to understand how sea level rise projections affect their properties and how the regulatory response will affect their future options and then plan accordingly. The owner who waits until the effects of sea level rise are knocking at the door may find that they do not have

options to protect the value of their properties. Now is the time to begin managing coastal real estate in ways to preserve options that will maintain the property's value. This planning may include taking steps to preserve the useful life of existing structures and to protect the property over time. Fortune favors the vigilant here.

You said that policies to adapt to sea level rise are rapidly advancing. What are the main changes that specialists talk about? Do they include building sea walls and other infrastructure needed to deal with rising water levels in the Bay Area?

Lampert: Sea walls and similar shoreline protection measures are disfavored at the Coastal Commission. There is evidence that in many locations along the coast, these types of measures reduce erosion and restrict the movement of sand to replenish beaches. The Commission is very much aware of this evidence and commissioners regularly receive updates from staff in hearings emphasizing the problems with sea walls and rock revetments. At the same time, the Coastal Act requires the Commission to approve these types of measures when necessary to protect an existing structure. The Coastal Commission's guidance is to eliminate existing structures that require such protection over time, by requiring those structures to be removed and replaced with new construction that will not require sea walls and revetments. For the most part, the Commission's guidance needs to be incorporated into city and county coastal regulations in order to be implemented, which is occurring in many areas around the state now.

A planned retreat strategy will pit the private owner and public coastal access against one another over time. However, there are approaches that are being tried that would not force this trade off. They generally share the objective of combining shoreline habitat enhancement with shoreline structural protection. Such an approach involves beach nourishment, where a revetment is used in connection with the import of sand to restore a beach habitat lost to sea level rise and scour. These programs have proved to be expensive, and there is a growing concern that suitable sand supplies are not available.

Eliminating historic dams and other structures in drainages that have reduced the sand supply for beaches has been discussed. There is also a discussion about whether offshore artificial reefs can be used to protect existing shorelines. Offshore reefs have been used successfully in Europe, but there are questions about whether they will work in the long term on California's coast and whether the ongoing designation of offshore marine sanctuaries along California's coast will allow for their introduction in those areas. The discussion regarding what strategies can be successfully employed in the face of sea level rise is still in its early stages, but we

should expect that the Coastal Commission and localities will emphasize the use of these approaches over shoreline structural protection alone.

Part of the discussion going on now involves who will pay for these approaches. Although there has been some experimentation with public/private partnership approaches, for the most part the private property owner is bearing the cost, which can be considerable and ongoing. Private property owners who wait until there is an emergency to begin protecting their properties may have few options to avoid these costs. Alternative approaches that may reduce some of the cost require a lead time to carry out. Now is the time for coastal property owners to start planning ahead to have alternative approaches available when they are ultimately needed.

The boundary between public and private land on the coast is the mean high tide line. How do you think private land owners will react when their land will become public land as that line advances inland with sea level rise?

Lampport: I expect a common reaction will be a desire to sue the state for taking their properties. While the law is still evolving in this area, a straight takings claim along these lines faces formidable hurdles. California law recognizes that the mean high tide line is an ambulatory boundary, which moves as the sea level rises and as the shoreline erodes. That rise is inherent in a coastal property owner's title.



However, when a government action is the reason for property damage resulting from sea level rise, the answer may be different. This is in part based on the California Constitution. Although California is often regarded as one of the most restrictive regulatory environments with respect to land use, the takings clause in the California Constitution is actually broader than the takings clause in the Fifth Amendment in the U.S. Constitution.

Under the California Constitution, private property cannot be taken or damaged for public use by a government act unless the government pays the owner just compensation. The concept of a taking including the damaging of private property for public use by a governmental act expands

the concept of a taking in California. Recent case law has applied the “damage for public use” language in the California Constitution to hold the California Department of Fish and Wildlife strictly liable to private property owners when measures implemented for habitat protection purposes resulted in the properties being inundated. There may be remedies in situations where private property damage results from government actions taken to further state sea level rise policy, either as a result of removing structures that protect private property or as a result of refusing to approve measures to allow property owners to protect their properties.

I would expect that property owners who are approaching sea level rise and related government policies strategically will find ways to account for the law in their planning.

A few western cities have already sued some of the world’s largest oil and gas producers, claiming these companies are responsible for climate change, including rising sea levels. What do you think will be the most likely outcome of these lawsuits?

Lampert: Much would depend on the evidence in the case to which I am not privy. In general, I think we are looking at litigation that will take years to be decided. The outcome in that litigation is not a forgone conclusion. It is not clear that carbon-based gas emissions can be viewed in the same way as cigarettes, which involved a product sold directly to the consumer. An entire economy grew around technology that consumed fossil fuels, which could influence a different legal outcome.