Draft Residential Adaptation Policy Guidance

Written/Emailed Public Comments

Date received	Signed	Affiliation
8/29/2017	Ed Spriggs	City of Imperial Beach
9/6/2017	Jeli Gavric	California Association of Realtors
9/15/2017	North Marshall Residents	East Shore Planning Group
9/18/2017	Mary Halley	East Shore Planning Group
9/22/2017	Eric Anderson	Coastal Rights Coalition
9/27/2017	Keith Adams	Coastal Property Owners Association of Santa Cruz County
9/27/2017	Ashley Eagle-Gibbs & Morgan Patton	West Marin Environmental Action Committee
9/28/2017	Katie Beacock	public citizen
9/28/2017	Heather Lindsey	public citizen
9/28/2017	Jeff Loomans	Seadrift Association
9/28/2017	Peter Sandmann	Seadrift Association
9/28/2017	David Carlson	Santa Cruz County
9/29/2017	Jennifer Blackman	Bolinas Community Public Utility District
9/29/2017	Terry Sinnott	City of Del Mar
9/29/2017	Laura DeMarco	public citizen
9/29/2017	Aaron Engstrom	Ventura County
9/29/2017	Liz Gagneron	State Coastal Conservancy
9/29/2017	Terry Houlihan	public citizen
9/29/2017	Ed Spriggs	City of Imperial Beach
9/29/2017	Jon Corn	The Jon Corn Law Firm
9/29/2017	Jack Liebster	Marin County
9/29/2017	Kathleen McCarthy	public citizen
9/29/2017	Jennifer Savage, Sarah Newkirk, Penny Elia, Garry Brown, Nancy Okada	Nature Conservancy, Surfrider Foundation, Orange County Coastkeeper, Sierra Club California
9/29/2017	Penny Elia	Coastal Advocate
9/29/2017	Robin Rudisill	public citizen
9/29/2017	Glenn Russell	County of Santa Barbara
9/29/2017	Judy Taylor	public citizen

Matella, Mary@Coastal

From: Edward Spriggs <ejspriggs@yahoo.com>
Sent: Tuesday, August 29, 2017 1:59 PM
To: ResidentialAdaptation@Coastal
Subject: Webinar Follow Up Question re: Redevelopment Definition

Dear Kelsey,

Thanks for the informative webinar. You asked me to send an email to clarify this question. On p 46 in the box titled Improvements, Alterations and Additions to Existing Structures, it states in the box "Redevelopment is intended to capture alterations related to structural components OR market value. For example, in cases where development might be less than the 50% threshold for redevelopment, it might still be considered redevelopment if AN INCREASE IN ECONOMIC VALUE EXCEEDING 50% OF MARKET VALUE RESULTS FROM THE ACTIVITY."

This seems intended to mean that alterations that COST less than 50% of the market value are lumped in if they result in a market value increase of 50% or more.

However, this scenario is NOT described in the the A or B options described in the B7 discussion on redevelopment. A addresses mainly physical aspects of the alteration. B addresses the COST of the alteration versus the market value, but not market value increases as a result of the alteration.

I think the box language about increased market value should be eliminated because first it is not discussed in A or B below, and second because it is very hard to measure the causation of market value increases in rising market time periods. Perhaps too much room for disputes and even litigation unless this is really clarified or changed as suggested.

Best regards,
Ed Spriggs
Imperial Beach

CALIFORNIA ASSOCIATION OF REALTORS®

September 6, 2017

VIA ELECTRONIC FILING

Dayna Bochco, Chair
California Coastal Commission
c/o Sea level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, California 94105

RE: Draft Residential Adaptation Policy Guidance - July 2017

Dear Chair Bochco,

Thank you for the opportunity to provide comments on the Draft Residential Adaptation Policy Guidelines (Residential Guidelines) for addressing sea level rise in Local Coastal Programs. With California's coast being the first line of defense against sea level rise, we appreciate the importance of local and regional planning for areas potentially threatened by inundation and erosion. The California Association of REALTORS® has over 110 years of interest and involvement in land use planning, hazard mitigation and disclosures for homes throughout California's varied landscapes. We respectfully offer the following comments for you to consider regarding the proposed language in the Residential Guidelines.

In **Section 3. Developing adaptation strategies for specific areas**, we appreciate the acknowledgement that *"no single category or even specific strategy should be considered the "best" option as a general rule"*. Due the complex nature of sea level rise and coastal erosion, each community along California's 1,200+ miles of shoreline can anticipate differing degrees of hazard.

We encourage local governments to openly work with scientists, consultants and community members to identify hazards and create legally viable solutions that are consistent with that community's character and values.

In **Section 4. Legal Considerations**, we must respectfully disagree with the assertion that, regarding the Coastal Act, *"Section 30235's directive to allow shoreline armoring in certain circumstances only applies to development that existed as of January 1, 1977."* This interpretation of "existing structure" is new and not supported by either historic Coastal Commission decisions or court decisions.

Numerous published resources support our understanding that the Coastal Commission has historically interpreted "existing structure" to include development occurring after January 1, 1977. We respectfully submit that the term "existing structure" should continue to be interpreted as a structure that existed

prior to the application for shoreline armoring. Maintaining the long-standing and legally justified interpretation of "existing structure" will ensure the consistent application of rules to coastal property owners and remain consistent with several Coastal Commission decisions that approved the construction of shoreline protection for homes built after January 1, 1977.

Recent action by the legislature in rejecting AB 1129 (Stone), a bill that would have enacted the limited definition of "existing", serves to support our interpretation.

The proposed interpretation lacks legal justification and would be ruinous and unfair to coastal landowners who currently need or will need to protect their existing homes from the ravages of rising sea levels.

Section 7. Model Policy Language. For this Section of the Residential Guidelines, we offer the following comments based on Subsections as listed:

> **A.3. Mapping Coastal Hazards.** This section offers model language that compels local governments to *"map areas subject to existing and future coastal hazards that will be exacerbated by sea level rise and that present risks to life and property"*, and *"put property owners on notice if their parcels are subject to current or future coastal hazards on the Coastal Hazards maps."*
>
> We appreciate the assignment of mapping and noticing to local governments. However, we respectfully suggest that, in addition to the obligation to notify existing property owners, all Coastal Hazard maps and other relevant maps and information should be prepared using Geographical Information Systems (GIS) data. The maps and information should be available in a scale that offers homeowners site-specific detailed information on potential future hazards, development restrictions, and compliance triggers. These maps and other relevant information should be made available to the public on a single website in a format that is searchable by address and/or parcel number, such as the existing website http://myhazards.caloes.ca.gov/.
>
> **A.6. Assumption of Risk, Waiver of Liability and Indemnity.** Regarding the recorded deed restriction reflecting the permit conditions for new coastal development, we offer the following comments:
>
> *"2) to assume the risks of injury and damage from such hazards in connection with the permitted development;"* could be simply stated as a warning that if the condition of the property should change due to future hazards, the homeowner understands they will be liable for any damage arising from those hazards. The assumption of risk is a legal transfer of liability that ought to be negotiated by parties to a sale, and not imposed by mass recoding by a regional governmental agency.
>
> *"3) to unconditionally waive any claim of damage or liability against...for injury or damage from such hazards;"* We see no reason why a homeowner would need to unconditionally waive any claim for injury or damage against the local entity. Again, we

respectfully object to the unilateral imposition of a waiver. Instead, local agencies can simply add language to the permitting process stating that no warranty is being made by the permitting agency as to the future viability of the development due to potential future hazards.

"4) to indemnify and hold harmless the (local government or Coastal Commission)..." We find this provision unnecessary with the assumption of liability outlined in the sections above.

"6) that public funds may not be available in the future to repair or continue to provide services to the site (e.g., maintenance of roadways or utilities);" This provision should include a description of a triggering event or set of conditions upon which the local government would cut off public funding.

A.7. Real Estate Disclosure of Hazards. The proposed language to *"require real estate disclosures of all coastal hazards"* as described in the paragraph would require a lengthy and detailed research and reporting process. Such a comprehensive scientific research and reporting process would be impossible for the average homeowner to accurately and adequately prepare.

As in A.3. Mapping Coastal Hazards, it should be incumbent upon local jurisdictions adopting this policy to provide the necessary disclosure information to the public, ideally on a website searchable by address and/or parcel number, such as the existing website http://myhazards.caloes.ca.gov/. The information on the website should include all the local and parcel-specific information called for in the disclosure mandate.

Having this detailed information on a website would also serve to provide information to prospective buyers in advance of an offer. Existing law is to disclose all material facts, but if the information is too difficult to access, it will not be known and not delivered to prospective purchasers.

B.7. Redevelopment. The recommended definition of "redevelopment" is concerning and may trigger significant compliance requirements for otherwise routine repairs or renovations for existing homes. As proposed, "redevelopment" includes *"Alternation (including demotion, renovation or replacement) of 50% or more of major structural components including exterior walls, floor, roof structure or foundation, or a 50% increase in gross floor area."* (underlining added)

This definition unfairly restricts residents from necessary routine maintenance and upkeep of their homes, such as the replacement of a roof, which, depending on material, has an average lifespan of 10-40 years. Similarly, the average lifespan for laminate flooring is between 15 and 25 years, but it can vary from as short as 10 years to as long as 30 years. In contrast, Section 1A. Identifying Planning Horizons affords residential or commercial buildings *"75-100 years"* of *"anticipated life of development in the coastal zone"*. We understand that this is *"not an entitlement to maintain development in hazardous areas"*. However, a routine roof or flooring replacement project under the proposed definition of "redevelopment" will trigger the following requirements for all homes, regardless of the presence of a hazard:

B.3 Reliance on Shoreline Armoring will require the home to be *"(re)designed and sited in a manner that does not require or rely on the usage of a shoreline protective device to ensure geologic stability"* even if the existing home is currently *"protected by a legally authorized shoreline protective device."*

F.5 Evaluation of Existing Shoreline Armoring will require any application for "redevelopment" to also contain an evaluation of the "*efficacy and necessity*" and ultimately removal of shoreline armoring because of the requirement to re-site and redesign to avoid shoreline armoring as specified in **B.3**.

G.9 Managed Retreat Program Any approval for "redevelopment" in a Beach Open Space zone will be conditioned on mandatory participation in the Managed Retreat Program. This will require a deed restriction where the home will be modified or removed *"when necessary to maintain the minimum beach width".*

Thus, routine maintenance will trigger re-siting, redesign, armoring removal, and for some properties, forced participation in the Managed Retreat program. These onerous, costly, and time-intensive requirements effectively deny the ability of coastal home owners to reasonably maintain their property under normal operating conditions and life expectancies.

In addition, the proposed rule discourages the installation of desirable improvements like water conservation systems, solar power, and energy efficiency features.

F.1 Shoreline and Bluff Protective Devices. Again, we disagree with the proposed new definition of "existing development" as indicated above in our comments on Section 4. Legal Considerations.

G.3 Sea Level Rise Overlay Zones. As described, these zones will define the extent of land for which specific land use restrictions or requirements will be imposed in the coastal zone. Downzoning, "redevelopment" restrictions and structural removal are suggested measures to preserve coastal resources. We respectfully suggest that restricting a homeowner's ability to rightfully maintain and repair their home under standard conditions poses no threat to coastal resources. The outright prohibition on home maintenance and repair as described in B.7. Redevelopment is an unnecessary overreach of authority, patently unfair and guarantees the degradation of the vibrant communities that makes the coastal zone attractive.

Additionally, as in A.3, we respectfully suggest that all Coastal Hazard maps, including "Overlay Zones" should be prepared using Geographical Information Systems (GIS) data. The maps should also be available in a scale that offers homeowners site specific detailed information on potential future hazards, development restrictions, and compliance triggers and other necessary and relevant information. These maps should be made available to the public on a single website in a format that is searchable by address and/or parcel number, such as the existing website http://myhazards.caloes.ca.gov/.

Local governments should also be under obligation to notify existing property owners of the Overlay Zones and any other information or facts about hazards associated with their property.

G.4 Beach Open Space Zones. These zones inappropriately redefine existing conforming structures (homes) as non-conforming for the purpose of denying homeowners the ability to rightfully maintain or repair their homes. "Non-conforming" homes are subject to acquisition by the Coastal Commission under G.9 Managed Retreat Program, where local government would benefit from early-acquisition of these properties by making them residential leases or vacation rentals. It is offensive that a local government would essentially rezone and condemn a home based on public safety and then deem that home habitable for transient occupancy to the benefit of local government coffers. Unchecked early-acquisition programs could result in unjust enrichment of a local government at the expense of home owners. California law requires both just compensation and public necessity for a taking of private property, but the proposed rule allows condemnation without these protections.

Under the **G.9 Managed Retreat Program** any "redevelopment" permit in a Beach Open Space zone will be conditioned on mandatory participation in the Managed Retreat Program. This will require a deed restriction requiring the home to be modified or removed *"when necessary to maintain the minimum beach width"*. Again, as defined in B.7, "redevelopment" could be something as simple as a routine roof or floor replacement. Conditioning routine maintenance or repair upon a deed restriction will force homeowners to either allow their homes to fall into disrepair or skirt the permit process, neither of which are good for the community.

We hope that you find our comments on the Residential Guidelines relevant and helpful. We look forward to constructive collaboration in the regulatory process, and seeing our comments and suggestions incorporated into the final draft of the document. If you have any questions about our comments or would like greater detail on any of our comments please do not hesitate to contact me at (916) 492-5200 or jelisavetag@car.org.

Sincerely,

Jeli Gavric
Legislative Advocate

CC: Members, California Coastal Commission
Jack Ainsworth, Executive Director, California Coastal Commission

Matella, Mary@Coastal

From: Tom Flynn <tomflynn@sonic.net>
Sent: Friday, September 15, 2017 4:01 PM
To: ResidentialAdaptation@Coastal
Subject: Comments on Draft Residential Adaptation Policy Guidance

North Marshall Residents
P.O. Box 734, Marshall, CA 94940

September 15, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Delivered to ResidentialAdaptation@coastal.ca.gov

Comments on Draft Residential Adaptation Policy Guidance

Dear Members of the California Coastal Commission:

We are writing as a group of northern Marshall residents in supplement to the letter of East Shore Planning Group.

The Draft Residential Adaptation Policy Guidance summarizes it's purpose as:

This Guidance is advisory and not a regulatory document or legal standard of review for the actions that the Commission or local governments may take under the Coastal Act.

This Guidance, which will be presented to the Coastal Commission for consideration and formal adoption as interpretive guidelines, is intended to assist local governments in planning for sea level rise adaptation. (Underline added)

However, interpreting the Guidance document's true intent is challenging due to substantial communication issues. The lack of transparency in creating this document and the failure to notify the public about possible involvement in the process, have already been perceived as threatening. This is making many wonder: is this document intended less for providing assistance or more to single out residential properties and establish takings litigation precedents? With some thoughtful consideration, the need for a more collaborative approach between staff and coastal communities is readily apparent.

The basis of policies being proposed appears to be as stated in the Guidance document: "maintaining residential development adjacent to the shoreline will cause the narrowing and eventual loss of beaches, dunes and other shoreline and offshore recreational areas."

First it should be recognized that this statement is applicable to certain kinds of measures in certain locations but not to all coastal areas. Second, this statement is also overly broad and oversimplified in making a simple causal link between maintaining residential development and very extensive loss. The threat of climate change induced sea level rise (SLR) and shoreline loss should be taken very seriously but we must be clear that this threat is an underlying and much larger cause to be addressed--rather than "maintaining residential development".

The Guidance document continues: "This new threat to public access has the potential to cause significant conflicts with the Coastal Act, which was enacted for the purpose of protecting California's coastal resources." In the more encompassing context of SLR as the underlying threat, Coastal Commission management and Commissioners should be aware that some CCC staff have also agreed that: if policies make it more difficult for average coastal community members to maintain their homes on the coast, then it will be only those who have the most money and the most property who will be able stay on the coast. Consequently coastal access would become increasingly exclusive. This would be significantly in conflict with the Coastal Act, which was enacted specifically to protect 1) the coastal environment and 2) affordable coastal access including full time residential and visitor-serving overnight stays.

This Guidance document also seems to build on the 2015 Coastal Commission's 2015 Sea Level Rise Policy Guidance, which most coastal property owners were also not given adequate notice of or were aware of. That "Guidance" (as quoted in this more current Guidance): "interprets "existing" development in Section 30235 as development that was in existence when the Coastal Act was passed. In other words, Section 30235's directive to allow shoreline armoring in certain circumstances only applies to development that existed as of January 1, 1977." It appears that George Orwell's 1984 is well upon us when a guidance is also a directive and when "existing" only applies to things that existed 40 years ago.

Seriously yet ironically, this policy/regulation in-guidance-clothing would penalize those who have gotten permits since 1977 for things like solar systems, bringing their electrical systems up to code or maintenance items like roof replacements. Would those who have done work without permits since 1977 be then favored?

Clearly there is a need to rethink all of this more carefully. There are aspects of the recent Guidance document appearing to have more public interest intent, which can instead be built upon. The document uses terms like "resilient shoreline residential development" and "proactive planning" to ensure protection of coastal resources and development. It also talks about a visioning process among coastal communities and local governments: "to learn about 1) the increasing hazards that threaten their communities and its coastal resources 2) what options exist for protecting their threatened built and natural assets, and 3) what adaptation pathway choices are suitable given social, economic, legal, resource, and environmental justice concerns."

Doesn't it make more sense to get coastal communities fully knowledgeable and engaged with pathway choices and options before we aggressively limit options in all cases? In fact we now need visioning that is very pragmatic and specific about all the engineering, environmental, economic, social, legal, and technological details of our options. To make this clear and tangible we need to collaboratively explore promising strategies

and innovations and conduct targeted pilot projects, which thoroughly increase our understanding of all aspects of these options.

Certain actions, which are clearly causing immediate harm in specific locations should be discontinued. But overly broad adversarial approaches will waste huge amounts of time on legal and other conflict. Instead the urgency should be directed toward proactive community approaches and working together on comprehensive solutions.

The State of California is an international leader in it's policies and programs to mitigate and prevent the impacts of climate change--especially from sea level rise and damaging storms. There is a huge range of projected sea level rise and impacts. Where we land on this range, either worst-case scenario or not-so-damaging, depends on what we all do, especially over the next 10 to 20 years. It logically follows that coastal communities and the California Coastal Commission should be integrated with the rest of the State in a collaborative leading-edge approach to both mitigate and adapt to climate change.

Our sincere thanks for your consideration.

East Shore Planning Group
P. O. Box 827
Marshall, CA 94940
ESPG@eastshoreplanninggroup.org

September 18, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Delivered to ResidentialAdaptation@coastal.ca.gov

Comments on Draft Sea-Level Rise Residential Adaptation Policy Guidance

Dear Members of the California Coastal Commission:

I write on behalf of the East Shore Planning Group. ESPG is a California not-for-profit corporation formed in 1984 that has a membership of about 90 owners and tenants of residential, commercial and agricultural properties in the unincorporated area of Marin County in Marshall and along the east shore of Tomales Bay. ESPG is the primary local organization involved with issues of development in the area. ESPG has been active in the formulation of the amendments to the Marin County LCP since the process began.

The town of Marshall dates back to the days of the narrow-gauge railroad that served the area from 1876 to 1930. Shoreline bulkheads were constructed and maintained to protect the rail lines throughout the decades. Those same bulkheads now protect Highway One, several visitor-serving businesses, many homes and an exemplary community wastewater system that protects the environment and serves residential and visitor uses.

Small shore-side cottages along Tomales Bay in Marshall— typically less than 1,000 sq. ft. The bulkheads behind the homes protect Highway One and the East Shore Community Wastewater System that serves 50 of Marshall's 84 homes. The town of Marshall is an extremely popular and picturesque historic tourist destination, an important coastal resource for the enjoyment by visitors and residents alike.

In our view, the greatest threat to our community, and the coastal resources it protects and provides, is not sea-level rise. Nor is it the San Andreas Fault, which runs down the center of Tomales Bay. Rather, the greatest threats are the regulatory proposals being advanced by staff of the Coastal Commission. What is at stake is not just our homes, but also a vibrant and unique community.

Regular Maintenance Should not be a "Trigger" for Meeting CCC Sea-Level Rise Requirements for New Development

In Section F.4, "Repair and Maintenance of Shoreline Protective Devices," the Policy Guidance states. "Replacement of 50 percent or more of the protective device shall not be considered repair and maintenance but instead constitutes a replacement structure subject to provisions applicable to new shoreline protective devices."

Shoreline homes along Tomales Bay, and particularly homes on pilings above the water, require substantial maintenance. Pilings, foundations and bulkheads need to be reinforced and replaced, and seismic upgrades may be advisable. Wood floors, walls and roofs exposed to marine conditions may need restoration or complete replacement. These issues of wear and aging are wholly unrelated to sea-level rise.

Yet under the proposed Policy Guidance, many timely or necessary repairs would trigger stringent requirements making it prohibitively expensive to seek permits and undertake the repairs. The inevitable outcome will be deferred maintenance and accelerated deterioration. Property by property, our homes, our visitor-serving businesses and our community will be lost— well before a rising sea might affect us.

Alternately, permitting requirements will be ignored.

Neither of these outcomes is desirable. Both can be avoided by framing a more discerning policy. We submit that under the Policy Guidance, regular maintenance of existing homes and businesses should not trigger the "provisions applicable to new shoreline protective devices." The "provisions" should apply only to those activities that specifically address the threats of sea-level rise.

Requirements for Sea-Level Rise Modifications Should be Reasonable, Incremental and Adaptive.

Many of the other requirements in Section F of the Policy Guidance, "Building Barriers to Protect from Hazards – Shoreline Armoring," would make it impractical and economically impossible for property owners in Marshall to respond to the challenges of sea-level rise. These requirements appear to be punitive, and they presume that the knowledge of sea-level rise and available responses is complete, which it is not.

For example, the requirement of Section F.9, "No Future Shoreline Armoring", that "... property owners shall be required to waive any rights to future shoreline protection..." would prevent future technologies and community-wide approaches from being employed in the future.[1]

[1] See, for example, those discussed in Marin County's C-SMART draft Marin Ocean Coast Sea Level Rise Adaptation Report (July 2017) at pp. 199-209

Moreover, these policies and many others in the Policy Guidance would prevent incremental modifications to address sea-level rise. It would make much more sense to plan for stages as they occur and as more is learned about this complex issue.

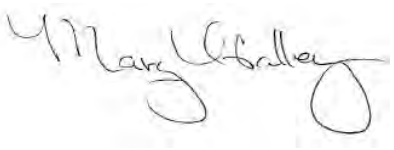
For example, a property owner should be able to raise a bulkhead or raise a home a few feet to secure another 20-30 years of enjoyment and use of the property. Plans for any subsequent responses to sea-level rise should rely on emerging technologies and community-wide programs and initiatives. In any event, further adaptations would be subject to Coastal Commission permitting and review, so a preemptive waiver of the right to seek a permit seems excessive.

* * *

The foregoing are the two most important concerns we have with Policy Guidance. There are additional comments that members of the East Shore Planning Group and its Board of Directors wish to present. They are in the attachment to this letter. Many of these comments are equally applicable to the 2015 Sea Level Rise Policy Guidance, of which we were unaware when it was being considered.

Thank you for your consideration of these comments.

Sincerely,



Mary Halley, President, East Shore Planning Group

East Shore Planning Group
Comments on Draft Sea-Level Rise Residential Adaptation Policy Guidance

Attachment

1. More opportunity for public input As with the 2015 Sea Level Rise Policy Guidance, this appears to be a *de facto* regulation that deserves the public process for input, comment and appeal as required by the California Administrative Procedures Act. Regardless of whether the APA applies, the weak webinars and the presentations of staff recommendations to the Commission are not a substitute for the input and consideration that these policies deserve. At the very least, a special committee of the Coastal Commission should be formed to consider staff recommendations, provide public forums in various localities, provide other opportunities for public comments, and make recommendations to the Commission.
2. Failure to consider the coastal-resource value of coastal communities Marshall represents much more than a collection of individual private homes. It is a vibrant, picturesque and historic community – now a tourist destination – that is itself a coastal resource worthy of protection. Losing our most vulnerable properties to Coastal Commission policies and permit requirements (as was the case with the historic Marshall Tavern) will erode and destroy the community. Policies that unnecessarily reduce the resale value of properties will do likewise. An objective of the Policy Guidance should be to maintain and protect long-term coastal communities as coastal resources.
3. Community action would be foreclosed Marshall has a long history of working as a community to address problems.

    - In the 1980s, in response to potential development of a large property formerly owned by Synanon, Marshall developed the East Shore Community Plan. The Plan and our positive contributions resulted in the transformation of the property into State Park's Marconi Conference Center, which hosts conferences for non-profit institutions at reasonable rates.
    - In 2005 Marshall and Marin County formed a public-private partnership to develop an advanced wastewater system for the East Shore of Tomales Bay. When completed in 2015, it was approved by your Commission, which lauded it as a statewide example of proactive community action for environmental protection.

    Marin County's Draft Sea-Level Rise Adaptation Report (July 2017) at page 207 discusses "community-wide solution to raise all homes through a coordinated effort" as a potential solution for some of the East Shore. Yet, Coastal Commission staff's home-by-home severe permitting Policy Guidelines preclude both the opportunity and time needed to develop community-wide initiatives of this sort.

4. Preservation of housing There are few areas in California where housing is less available than in Marin County. While affordable housing unfortunately is not a Coastal Commission priority, simply losing housing stock at any level creates even more pressure on all of the area, regardless of economic class. And, the Policy Guidance's expensive permitting requirements favor the wealthy over others who cannot afford to comply. These are other reasons not to prematurely condemn coastal housing by regulatory requirements.

5. Mitigation Mitigation requirements should relate solely to the actual and additional negative impacts resulting from modifications and improvements that address sea-level rise. They should not be applied as a matter of course, indiscriminately affecting projects that cause no losses. Nor should they be applied to repair and maintenance activities that merely maintain the status quo. The Marshall homes shown in the photograph do not front any beaches or tide pools — simply mud exposed only at the most extreme low tide. Preserving the old bulkheads would not result in any additional loss of sand produced from erosion. Nor would preserving these properties compromise the public trust doctrine or the public's enjoyment and use of tideland waters in any way. The public would continue to kayak, boat, fish and swim directly alongside the houses, as they do today.

Coastal Rights Coalition Inc.

1880 N. El Camino Real

San Clemente, CA 92672

949-351-9642

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Via US Mail and email: ResidentialAdaptation@coastal.ca.gov

September 21, 2107

RE: Comments on Draft Residential Adaptation Guidance

Comments:

1. Adaptation strategies will be required for all coastal resources and development. These must be community based and MUST apply equally to all property types, including public property. *"To build the resilience of coastal communities and ecosystems, coordinated adaptation efforts must consider sea level rise and coastal flooding impacts." (NOAA Digital Coast)* Adopting strategies or "guidance" on a piecemeal basis, i.e. "residential" is not only wrong, it is certain to promote uncoordinated strategies that are ineffective.
2. The ownership rights of all private property types are equally protected by the State and / or the U.S. Constitution. Throughout this document, limitations are proposed to abrogate those rights on an arbitrary and capricious basis, or force others (local governments) to do so in Local Coastal Plan revisions. Such "Takings" are illegal.
3. We are well aware that the Coastal Act was effective January 1, 1977. Throughout this guidance document, you repeatedly assert that development permitted after that date is denied protection from storm damage and should be treated differently from those permitted prior to that date. This assertion is wrong, has no basis in law and should be deleted wherever it occurs.
4. Despite your claims to the contrary – "What it is Not", this document is "rulemaking". It must be submitted to the Office of Administrative Law for approval, prior to any consideration by the Coastal Commissioners.

Matella, Mary@Coastal

From: Keith Adams <keitheadams@hotmail.com>
Sent: Wednesday, September 27, 2017 2:41 PM
To: ResidentialAdaptation@Coastal
Subject: Re: Draft CCC Residential Adaptation Policy Guidance

September 27, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

RE: Draft Residential Adaption Policy Guidance

To: Sea Level Rise Working Group:

In regards to the above policy guidance it is imperative to state clearly that it is only policy guidance. It should further mandate that the California Coastal Commission will not require that any of policy guidance be adopted in LCP's or that it will reject or modify LCP's which do not adhere to the guidance.

The policy guidance seems to be targeting residences built after 1976 in an attempt to circumvent the Coastal Act's promise to allow coastal properties to be protected from the erosive forces of the ocean. It appears as an additional step towards removing the property rights of California coastal property owners contrary to the California State Constitution.

The policy guidance suggests that homes should be allowed to be destroyed by ocean forces or even removed without just compensation. This was confirmed during the web conferencing of August 29, 2017. The policy guidance needs to address and mandate compensation for properties which will be damaged or destroyed by any policy guidance that prevents homeowners from protecting their homes.

Residential coastal property owners are obviously the target of this policy guidance and yet commercial and public assets are not addressed. In the interest of the many concerns addressed in the policy guidance there should be comprehensive policy guidance for all coastal properties, both private and public.

It is suggested that the policy guidance be placed on hold until the above clarifications are included and a compensation mechanism is put into place.

Sincerely,

Keith Adams, President
Coastal Property Owners Association of Santa Cruz County
500 41st Avenue

Santa Cruz, CA 95062

From: California Coastal Commission <california@coast4u.ccsend.com> on behalf of California Coastal Commission <residentialadaptation@coastal.ca.gov>
Sent: Monday, September 25, 2017 4:00 PM
To: keitheadams@hotmail.com
Subject: Draft CCC Residential Adaptation Policy Guidance

Draft Residential Adaptation Policy Guidance

Comment Period ends 9/29/17

Download the
Draft Residential Adaptation Policy Guidance

This is a reminder that the Coastal Commission's public comment period for the Draft Residential Adaptation Policy Guidance closes **Friday, September 29th.**

The new policy guidance is a next step and builds on the Coastal Commission's 2015 Sea Level Rise Policy Guidance, which set forth broad principles related to planning for sea level rise. The Residential Adaptation Policy Guidance provides a more in-depth discussion of sea level rise adaptation policies specifically related to residential development and sample policy language that cities and counties could modify for use in different community and geologic contexts.

Past webinar recordings, Coastal Commission hearing presentation, and a downloadable draft document are available at our **webpage.**

Questions?
Please contact the Coastal Commission Sea Level Rise Team at ResidentialAdaptation@coastal.ca.gov

Submit Comments

Please submit written comments by September 29, 2017, by email to ResidentialAdaptation@coastal.ca.gov or by US Mail to the address:

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Visit our website

Connect with us

September 27, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105
Via Electronic Mail Only: ResidentialAdaptation@coastal.ca.gov

Re: Comments on *Draft Residential Adaptation Policy Guidance*

Dear California Coastal Commission Sea Level Rise Team:

The Environmental Action Committee of West Marin (EAC) offers the following comments on the California Coastal Commission's July 2017 *Draft Residential Adaptation Policy Guidance* (Draft Residential Guidance). EAC appreciates the California Coastal Commission's continued guidance on this important and complex topic.

EAC has been extensively involved with the Marin County Local Coastal Program Amendment process, which has informed our knowledge of environmental hazards, as Marin is one of the first jurisdictions to begin to tackle sea level rise (SLR) through a local coastal program (LCP) update.[1] EAC is also involved with Marin County's Collaboration: Sea-level Marin Adaptation Response Team (C-SMART) process, as well as the Bolinas Lagoon North End project.

As an overall comment, the Draft Residential Guidance presents many strong proposed approaches and policies for local municipalities to address SLR through LCPs. The following is a list detailing positive examples from the Draft Residential Guidance, including areas of the Draft Residential Guidance which align with EAC's climate change adaptation principles.

[1] The Draft Residential Guidance supports an LCP update based approach as the method to comprehensively address environmental hazards including SLR. *See* page 4.

Successes of the Draft Residential Guidance and Minor Recommendations in Italics

The Draft Residential Guidance successfully:

- Emphasizes use of the best available science.[2]
- Emphasizes the importance of maximum public access and protection of coastal resources[3] in light of SLR and the Coastal Act[4], ensuring that the California coast is protected for both present and future generations.[5]
- Encourages policies which seek to avoid the "coastal squeeze" and preserve important intertidal and low-lying habitats[6], which are especially important for shorebirds and other species. *More detail could be added on the importance of these coastal resources.*[7]
- Employs a suite of strategies and offers flexibility for different municipalities and geographic types (i.e. typologies).
- Employs a proactive and phased approach to SLR adaptation.
- Emphasizes the need for regional collaboration, especially around infrastructure and transportation planning.[8] *More emphasis and elaboration could be placed on this point.*
- Emphasis on the need for "enhanced community participation."[9] *Additional emphasis could be placed on the importance of public participation in community scale adaptation planning.*[10]

EAC would also like to endorse our support for the California Coastal Commission to develop additional guidance related to critical infrastructure, which was mentioned during the Commission's August 29th webinar on the Draft Residential Guidance.

[2] Draft Residential Guidance, pages 7 & 38, A.1. *Identifying and Using Best Available Science*
[3] Draft Residential Guidance, passim
[4] Draft Residential Guidance, pages 15-16
[5] *See* Draft Residential Guidance, page 5
[6] *See* Draft Residential Guidance, pages 12-13.
[7] For example, *see* Pacific Americas Shorebird Conservation Strategy, Audubon, (December 2016), *available at*: https://www.fws.gov/migratorybirds/pdf/management/PASCS_final_medres_dec2016.pdf
[8] *See* Draft Residential Guidance, pages 4, 31-32, 54 (G.1. *Management of Sea Level Rise Hazards*, v-vi.)
[9] *See* Draft Residential Guidance, page 4.
[10] This could be included under G. *Community Scale Adaptation Planning*, which begins on page 53 of the Draft Residential Guidance.

Recommendations for Additional Elaboration on the Typologies and Potential Funding Sources

In addition to the minor areas above where EAC recommends additional elaboration, EAC has identified a couple additional recommendations for the Draft Residential Guidance. EAC recommends below that additional elaboration is provided on the typologies, and EAC also suggests a potential funding source.

While it is clear from the Draft Residential Guidance that a customized approach is needed for adaptation to SLR based on the particular location and geographic type, more elaboration and research around this would be helpful. For example, the case studies of typology groups which begin on page 32 of the Draft Residential Guidance[11] are relevant, but more additional types and examples may be needed to illustrate the need for a customized approach by sub-regions, geographic areas, and/or shoreline types.

Using Marin County as an example, there are many different community and geographic types within just one county. For instance, the town of Marshall on Tomales Bay has very different geographic attributes than those present at Dillon Beach, Stinson Beach[12] or the bluffs of Bolinas. Marin County has many different geographic types, shoreline types, and infrastructure conditions. It is important that the Draft Residential Guidance provides sufficient examples and shoreline types to be a comprehensive resource for the varied municipalities. As a related point, when looking at a distinct area like Stinson Beach (or even a specific neighborhood within this village), it may make sense to take a more programmatic or community based approach, while ensuring protection of coastal resources and maximum public access are prioritized.

Within Marin County, certain areas like the town of Marshall have a unique relationship between the infrastructure and the residential development, which should be considered. For instance, the shoreline bulkheads along Highway One in Marshall make up an integrated system that helps support Highway One itself, as well as providing protection for the East Shore Community Wastewater System. These unique infrastructure relationships and geographic features should be considered as part of the adaptation planning.

Lastly, one additional suggestion that EAC recommends is that in addition to seeking other funding sources, municipalities could seek out foundation and/or land trust grants for acquisition of vacant vulnerable properties.[13]

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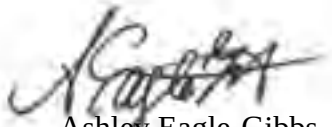
[11] *See also* Draft Residential Guidance, Table 1 on page 5.
[12] Stinson Beach is a helpful example as included on pages 35-36 of the Draft Residential Guidance, but it would be helpful to include additional varied examples as well.
[13] Page 54 of the Draft Residential Guidance includes property acquisitions. (G.1. *Management of Sea Level Rise Hazards*, iv.a.)

Thank you for your consideration of our comments and your continued dedication to SLR adaptation.

Respectfully,



Morgan Patton
Executive Director

Ashley Eagle-Gibbs
Conservation Director

Matella, Mary@Coastal

From: Katie Beacock <seadriftkatie@gmail.com> on behalf of Katie Beacock <katie@seadriftrealty.com>
Sent: Thursday, September 28, 2017 4:52 PM
To: ResidentialAdaptation@Coastal
Cc: Katie Beacock
Subject: comments

Thank you for allowing me to send along a few personal remarks about the Draft Residential Adaptation Policy Guidance dated July 2017.

I have lived in Marin County all of my life and have lived and or worked in Stinson Beach since 1973. I care deeply about the Community.

I would like to comment specifically about the remarks in section B7 about redevelopment. I would like to encourage the exploration of design based solutions as opposed to a blanket ruling of limiting a property owner's ability to rebuild or remodel including raising their property to FEMA heights. This has been a wonderful haven for residents and tourists for a hundred years. Those who are here welcome visitors. We have about a million cars a year passing through and stopping in Stinson Beach. There is no logical reason to force homeowners to retreat rather than use a design process to protect their home. This action would take away a property owners rights without even a monetary reimbursement. Why does this make sense??

The forces of Sea Level Rise are being handled throughout the world with some very creative solutions to protect individual property rights. Marin County had excellent workshops looking at some of the solutions during our Sea Level Rise Task force process for West Marin coast areas. The CCC should do some travel down this avenue instead of all your draconian solutions that are not solutions for the individual Property Owner and Tax Payer.

This document is so arbitrary and unimaginative that I am very disappointed. The original intent of the Coastal Act, which I voted for, did not have the intention of taking of Private Property in the manner you are designing. The public has plenty of access to the Beach in Stinson, more than the environment, the roads and local water can accommodate. I urge you to strike the thought of retreat rather than remodel for safety.

Katie Beacock

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Matella, Mary@Coastal

From: Heather Lindsey <hdlindsey@yahoo.com>
Sent: Thursday, September 28, 2017 8:32 PM
To: ResidentialAdaptation@Coastal
Subject: Comments Draft CCC Residential Adaptation Policy Guidance

To Whom It May Concern:

Please find suggested changes due 9/29 to the Draft CCC Residential Adaptation Policy Guidance. They are below and attached.

Disclose Risks to Property Owners , Page 8

Considering adding the word "impact" after the word "intent".

First sentence, page 9. Consider repeating the language found there at the end of page 2. ***"****For purposes of implementing the Coastal Act, no single category or even specific strategy should be considered the "best" option as a general rule. Different types of strategies will be appropriate in different locations and for different hazard management and resource protection goals. "*

Analyzing Alternative Adaptation Strategies, page 11, paragraph 4, first sentence.

Consider replacing "vital to" with "a requirement for"

Analyzing Alternative Adaptation Strategies, page 11, paragraph 4, last sentence.

Consider repeating the language found there at the end of page 2 for assistance in the framing the entire document. "In preparing an adaptation plan, communities should consider all of their options and evaluate them according to impact on coastal resources, effectiveness at reducing risk, costs, and feasibility (technical, legal, social, or political)."

Soft Shoreline Protection (Protect), page 12

Adaption Plans need to outline how/by which criteria cities and communities will evaluate and implement future solutions. The process for evaluating future technologies and solutions is a critical path missing in this section.

Adaptive Design (Accommodate), page 13

Adaption Plans need to outline how/by which criteria cities and communities will evaluate and implement future solutions. The process for evaluating future technologies and solutions is a critical path missing in this section.

Hard Shoreline Armoring (Protect), paragraph 3

Consider adding the following paragraph in the 3rd paragraph. "However, in the rare communities, where the hard armoring is set significantly higher than the community behind it, hard armoring may need an alternate evaluation."

Section 3, page 14, Managed Retreat (Retreat/Realignment), paragraph 3: This paragraph should delineate what the factors are that impact the feasibility of managed retreat. As the paragraph reads now, the entire focus is on how to overcome the challenges that managed retreat may face. This is insufficient; this area needs to list some of the more common factors that impact the feasibility of managed retreat, and state that the list is not comprehensive due to the differences between cities/counties. Some areas of this document are very detailed; the factors determining the feasibility of managed retreat should be as well. The people in charge of creating the Adaption Plans for their cities and counties need to understand what factors may help determine feasibility.

Consider inserting language after *"The feasibility of managed retreat and realignment strategies depends on a number of factors,"*. Language to be inserted, *"including, <u>but not limited to</u>:*

- *Geography*
- *Long-term financial impact of planned retreat on the community and on city finances*
- *Legal Precedent*
- *Historical Precedent*
- *Impact on current home owners in managed retreat area*
- *Numerical understanding of how many people, homes, structures, and public facilities need to be relocated*
- *Short-term financial impact of managed retreat on City finances*

The geography of the area suggested for managed retreat must be understood, as a one-size fits all approach is not appropriate nor necessarily defensible for a state with the coastline of California. For example, where the beachfront structures are significantly higher than the homes behind the beachfront, managed retreat may lead to negative and unanticipated externalities. In one community managed retreat will lead to greater and more frequent flooding for the hundreds of homes that are 12 feet below the ocean front homes as managed retreat will create a Lake Pontchartrain.

Feasibility should include the long-term understanding of the quantifiable impact of managed retreat specific to that city or area. The Plan should determine the impact of managed retreat on the number of homes, people, tax receipts, and city bonds. Where an Adaption Plan calls for managed retreat, the committee and City needs to understand and be able to defend their decision. This includes that the committee needs to be able to communicate to the city, the loss in tax dollars and sales receipts and understand whether the city can still finance its debts and/or sell bonds.

Feasibility also should depend on the legal precedent already in place.

Feasibility should also take into account what the impact of managed retreat is on current owners. In one area, it would lead to 100s of owners not being able to obtain refinancing or mortgages in perpetuity.

Feasibility also should include the short-term impact on the city, depending on the number of homes, value of homes, cost to relocate environmentally sensitive items in the managed retreat area, and the cost to defend the managed retreat. A city needs to understand whether it can survive the economic burden of managed retreat. This may be inferred in the following sentence "Selecting, financing, and promoting a managed retreat program will likely require a community scale approach to managing coastal hazards (Policy G.1) and creation of an Adaptation Plan (Policy G.2).", but it needs to be better outlined.

Section 3, page 14, Managed Retreat (Retreat/Realignment), paragraph 4:

Consider rephrasing "Again, a community visioning process is the first step for communities to take in order to explore the potential for such an adaptation approach." Throughout the document it is unclear whether a community visioning process is a condition precedent to managed retreat. Whether it is or is not, this needs to be more clearly communicated throughout the document.

Figure 2. Page 27.

Consider inserting a pathway where there is a remodel/new development but the city's legislation allows armament to remain.

Figure 3. Page 31.

Consider adding language "Triggers are dependent on the geography and patterns of the area. Trigger terms need to be well-defined."

G.9 (a) Managed Retreat Program, Page 57.

Consider adding "*for more than XXX percent of the calendar year"* after the language "width of ['[*XXX feet' or 'to restore adequate public access to the beach' feet*]."

G.9 (d) Managed Retreat Program, Page 57.

Consider adding "*for more than XXX percent of the calendar year*" after the language "is damaged beyond *[XX%] or is threatened with imminent damage;%];* is no longer habitable; or leasing becomes otherwise infeasible."

G.9 (a) Managed Retreat Program, Page 57.

This sections fails to envision a section where managed retreat will endanger an entire community. Managed “retreat” assumes that “retreat” is the best solution. But in cities/counties/areas where the beachfront structures sit higher than much of the community behind it, what is outlined does not work. Unless, the Coastal Commission is green-lighting the premature flooding of entire communities, then this needs to be understood and adapted for in the Plan.

Thank you for your consideration,

Heather Lindsey, Esq.

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SEADRIFT ASSOCIATION

September 28, 2017

California Coastal Commission
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San Francisco, CA 94105

RE: Draft Residential Adaptation Policy Guidance, July 2017

Dear Coastal Commissioners:

I am writing on behalf of the Seadrift Association, located in Stinson Beach, to comment on the Draft Residential Adaptation Policy Guidance.

The Seadrift Association has followed the development of both the earlier Sea Level Rise Policy Guidance document (2015) and of this Draft document. In addition, we have actively reviewed and extensively commented upon numerous drafts of Marin County's Local Coastal Program (LCP) Amendments, which are still in process and pending final certification. We have and continue to be concerned about negative impacts to the nearly 325 property owners in our association from the proposals in this and earlier Commission documents. We ask that you consider and respond to the following issues set forth in Section 7 of the Draft: "Model Policy Language:"

A.3 Mapping Coastal Hazards

This section mandates requirements that property owners must "agree to remove development subject to appropriate future triggers." First and foremost, no such mandate can be required in a document meant for guidance only; to do so would be a violation of the rulemaking procedures of the Administrative Procedures Act (APA). Second, over several iterations of Marin County's LCP, both Marin County staff and local constituencies have objected to and had removed such language from drafts proposed by Coastal Commission staff. To reintroduce this mandate in a document meant for guidance alone, when local jurisdictions have already deemed it inappropriate for local conditions, clearly violates the Draft's opening instruction in the "Use this document for:" section which states: "Not all of the content will be applicable to all jurisdictions, and readers should view the content as a menu of options to use only if relevant, rather than a checklist of requirements." There is no valid rationale for such a mandate when careful consideration by local governments and constituents has already determined that alternative solutions – such as Coastal Act compliant hazard remediation including use of elevation to address sea level rise – are more viable alternatives.

P.O. Box 128 Stinson Beach, California 94970-0128 (415) 868-9043 Fax (415) 868-9064

A.3.a Coastal Hazard maps

This section again imposes an illegal mandate, requiring that in development of coastal hazard maps "The maximum anticipated extent of potential coastal hazards (based on a worst-case "high" projection of sea level rise, using best available science) shall be considered." As we have argued for over three years in Marin County's LCP process, use of the maximum or "worst-case" projection for sea level rise in hazard mapping is invalid on several grounds. First, it is simply bad science: studies referenced by Coastal Commission staff as constituting current best available science such as the National Research Council's Sea-Level Rise for the Coasts of California, Oregon, and Washington 2012 (NRC 2012) make it clear that there is no valid rationale for determining that any given point in the projected range of sea levels over the subsequent 100 years – especially not the extremes of minimum projections or maximum projections – is more likely to occur than any other possible level. In the case of coastal Marin County, at a 100 year projection the range is so enormous- from 18" to over 7' -that mandating the extreme end of the range applies an absurdly unlikely standard. Furthermore, choosing this end of the range implicitly forces Marin County homeowners in many residential neighborhoods to take extremely expensive steps and meet potentially impossible standards for hazard remediation given that many of these locales would be inundated at, for instance, 7 feet of sea level rise but not at all given 3, 4 or 5 feet of sea level rise. To impose such an arbitrary standard is bad policy on top of bad science. Finally, such a mandate again ignores the direction in the Draft that "Not all of the content will be applicable to all jurisdictions, and readers should view the content as a menu of options to use only if relevant, rather than a checklist of requirements." As Marin County staff and its Board of Supervisors have consistently maintained and enshrined in Board level votes, in this jurisdiction a "worst case" sea level rise projection would be inappropriate to for local development conditions.

B.1.b Siting to Protect Coastal Resources and Minimize Hazards: Shoreline-specific

This section includes language requiring that "landward migration shall be determined based upon historical erosion rates, acceleration of erosion and flooding due to continued and accelerated sea level rise." While historical erosion rates may be obtainable, it is both unreasonable and unduly burdensome to require each homeowner to conduct a study to determine future "acceleration of erosion and flooding due to continued and accelerated sea level rise." Even FEMA and recent OCOF (Our Coast Our Future) surveys have been unable to forecast future accelerated erosion rates, and only extrapolate based on historical rates, concluding that good data for "acceleration" of such rates is generally unavailable. It is extremely hard to see how a homeowner or local city/county government could perform such analysis when state and federal agencies with far greater resources at their disposal are unable to. Finally, the language here is unacceptably vague when attempting to apply it to development codes: what body or organization exists to determine what "continued and accelerated sea level rise" is and how it might impact erosive forces along our coastline?

This section also contains provisions we in Marin County have rejected in the past and that even Coastal Commission staff has admitted in recent revisions might be inapplicable in our local jurisdiction. The requirement in B.1.b that "If development cannot be set back sufficiently

to avoid all risk during its anticipated life, due to lot size, configuration or other factors, it shall be located as far landward as possible and sited and designed to protect coastal resources and minimize hazards to the extent feasible," is again an unreasonable mandate when other valid remediation techniques are as good or superior to setting the development "landward". For instance, it is often better to site development where appropriate use of elevation or other remediation's are superior in protecting coastal resources, for instance in avoiding impacts to public views or public access routes; to simply mandate landward placement as a firm requirement ignores good engineering technique as well as careful attention to the provisions of the Coastal Act. In Stinson Beach, many sites actually slope downwards in the far landward direction – to require "far landward" siting perversely forces homeowners to build in the portions of their properties most subject to future inundation. This language must be modified to reflect the fact that local conditions do not always make landward siting the most appropriate policy.

B.3 Reliance on Shoreline Armoring

This section includes the very problematic subsection "This is true even if new development, including redevelopment, is protected by a legally authorized shoreline protective device, in which case the new development and redevelopment on the site shall still be designed and sited in a manner that does not require or rely on the use of a shoreline protective device to ensure geologic stability. " First, as has been pointed out in many proposed drafts of the Marin County LCP in the past, the clause "including redevelopment" is an overt attempt to circumvent the provisions of section 30235 of the Coastal Act, which explicitly grants owners of "existing structures" the right to "shoreline protective devices". There is no legal or rational policy-level argument that "redeveloping" a home somehow removes the explicit protections of section 30235 for an existing home. Second, to attempt to circumscribe that section's explicit protections by restricting it only to cases where the home does "not require or rely on the use of a shoreline protective device" is both a violation of the Coastal Act, and patently irrational – how could the drafters of the Act have explicitly provided the right to use of a shoreline protective device (SPD) to a home *only* in those cases where the home does not need such protection? Third, there is simply no valid interpretation of the Act that would permit such a mandate even for new development in a site already protected by a legally authorized shoreline protective; presumably if the SPD was legally authorized under the Act, then it had already been determined to be compliant with other provisions of the Act and so there could be no rational grounds to simply deny reliance on its usage.

B.6 Minor Development in Hazardous Areas

This section includes the language "Improvements and alterations that result in replacement of 50% or more of the existing structures shall be considered a replacement structure and treated as new development/redevelopment. All additions must conform to all applicable LCP policies, but an addition that results in redevelopment shall require the whole structure to be brought into conformance with the LCP". First, this is once again an illegal mandate on a local jurisdiction from a guidance-only document; local jurisdictions should be allowed to determine what is or is not a "replacement structure" and whether and how it must comply with applicable policies. There is nothing in the Coastal Act mandating a 50 % standard, and in many cases local governments have applied historically different standards for when

redevelopment might trigger certain compliance measures. Second, this is often bad policy. If, for instance, forcing application of updated LCP standards to legally constructed but otherwise unmodified portions of structures could cause a project to become economically unviable or otherwise impossible for a homeowner, they then might not take necessary preventative redevelopment measures such as moving a vulnerable section of a structure or raising an entire foundation to avoid hazards from sea level rise, and therefore would run counter to the requirement under the Coastal Act to minimize hazards to property and life.

B.7 Redevelopment

As noted under B.6, this is simply an improper mandate and one with no Coastal Act justification. The entire section should be deleted, or rewritten to provide examples (not mandates) as to what local jurisdictions might consider "redevelopment" for purposes of their particular circumstances. We note in particular that Marin County has repeatedly rejected attempts to impose this language in its LCP, on numerous grounds, and attempting to end-run the County LCP process by effectively forcing such language on local jurisdictions as "policy" is not and cannot be justified under the Coastal Act.

C.1 Adaptive Design

This section contains the language "where relocation and/or structure removal might be necessary at some time in the future , ensure that foundation designs or other aspects of the development will accommodate future relocation and/or structure removal. " First, this language is far too vague: any possible interpretation could be made of "might be necessary at some time in the future", and certainly one could imagine a range of scenarios from earthquakes to nuclear war, stretching into the far future, that render this standard practically meaningless. It should be clarified that there should be clear and understandable hazards present before such standards would apply. Second, we have noted in the past that in coastal Marin County, requiring certain "removable" foundation designs can force both bad engineering in a potential flood zones, and actually conflict with federal requirements under FEMA flood zone mandates that require specifically engineered foundations. The offending language should be stricken.

D.1 Removal Conditions/Development Duration

This section contains several problematic requirements. First, to state that new development "shall" be conditioned to require that it be removed and the affected area restored is an illegal mandate in a guidance document. Second, it allows removal of a property "if any public agency requires the structures to be removed", which improperly intrudes on the right for local jurisdictions to determine which public agencies might have such powers, and which certainly assigns excessive regulatory powers to "any government agency"; one might wonder whether for instance the local vector control authority could arbitrarily decide to make a homeowner remove their home? Third, as we have consistently pointed out, including the language "the development is no longer located on private property due to the migration of the

public trust boundary" is a determination and power completely reserved to the State Lands Commission, and cannot be a determination imposed either by the Coastal Commission nor local governments in their LCPs. Fourth and most blatantly illegal is the subsection requiring removal an existing home when "the development requires new and/or augmented shoreline protective devices"; as previously noted Coastal Act section 30235 explicitly grants the right to such SPDs to protect existing homes, rather than requiring they be removed. To attempt to circumvent the Act in such a manner would be a perverse reinterpretation.

F. Building Barriers to Protect From Hazards.

This section throughout contains language attempting to circumscribe section 30235 regarding "existing" homes by asserting that homes built post-1977 are not entitled to the protection of a shoreline protective device. As we have previously argued to the Commission on more than one occasion, this is simply not a legitimate interpretation of section 30235 given that "existing" contextually throughout the Act is clearly meant to apply to any existing home (as plain English reading would imply), and not as this section states, only to homes built prior to the passage of the Act. Published Commission policy decisions from the past decade in fact took the exact opposite interpretation of "existing"; to attempt to end-run and reverse prior established policy in a guidance document that has not undergone APA procedures is impermissible. Finally, numerous attempts including this year's proposed bill AB1129 have attempted to legislatively reinterpret "existing structures" as those existing prior to 1977; the fact that the Legislature, which is the only appropriate body for revision of section 30235, has declined to make exactly this amendment to the Act clearly demonstrates that "existing structures" are just that, existing ones and not only those in existence prior to the Act. Section 30235 is quite clear on the right of existing structures to shoreline protective devices and all attempts to change this by policy fiat in section F must be struck or revised to appropriately reflect state law and prior Commission policy in this matter.

F.5 Evaluation of Existing Shoreline Armoring

Again, as noted in B.3 above, the passage "Applications for new development or redevelopment that is associated with and/or protected by existing shoreline protective devices shall not rely on the device for protection" needs to be struck or rewritten, as it is both in clear violation of section 30235, and furthermore is arbitrary and capricious given that there are both sound reasons to use an existing SPD to meet the hazard mitigation and safety requirements of the Act, and no sound reason to deny its usage when the SPD is existing and legally authorized.

F.6 Shoreline Armoring Duration

This section again mandates that SPD authorization be removed completely when a property is "redeveloped", and that "In the case of redevelopment, removal of the shoreline protective device shall be required as part of construction of the redeveloped structure." As under B.3 and F.5, this is an inappropriate mandate and should be struck here.

Introductory Sections

Contrary to initial disclaimers that this document is for guidance only, the Draft Guidance document requires its model policies be included in the LCPs drafted by local governments. For example, on page 4 of the Draft, local governments are required "to complete and update LCPs in a manner that adequately addresses sea level rise and reflects the recommendations in this document." Again on page 8, the Draft states: "LCP updates that account for the intent of Policies A.1 – A.7 and G.1 – G.2 are necessary for every community addressing sea level rise." The Draft also contains, in Section 4 "Legal Considerations" a litany of questionable interpretations of the Coastal Act and related doctrines as if those interpretations represent established law, which, I am advised, they do not. One blatant example is the Draft's assertion that "existing" development within the meaning of Section 30235 of the Coastal Act means development predating the Coastal Act itself – a position contrary to the Commission's own prior determination, and not supported by the California Legislature.

It is clear that the Draft Guidance document either needs substantial revision or strict adherence to the rulemaking procedures of the Administrative Procedures Act before it can be adopted as Coastal Commission policy. If that is not done, local governments should be expected to simply ignore the document because of the many ways in which it fails to provide real "guidance," and instead attempts to dictate provisions and mandate their use in updated LCPs.

Very truly yours,

Jeff Loomans
President, Seadrift Association

cc: Brian Crawford, Director
Jack Liebster, Planning Manager
Kristin Drumm, Senior Planner
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September 28, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Re: Draft Residential Adaptation Policy Guidance, July 2017

Dear Coastal Commission:

I am writing on behalf of the Seadrift Association, a homeowners' association in Stinson Beach, California, consisting of approximately 325 residential building lots on the California coast, most of which have been developed with single-family residences. I write to comment on the above-referenced draft document.

The July 2017 draft purports to be only a "guidance" document rather than a regulation, and as such, it purports to provide "guidance" to local governments in connection with their local coastal programs (LCP's) and development codes regarding residential developments in the coastal zone. However, the language of the document, in numerous places, is directive rather than advisory, and it is clearly intended to set forth the Coastal Commission's requirements for local governments in their creation and adoption of regulatory policies governing coastal development in the future.

Although the language used in the draft document appears to be advisory in form, throughout the document the precatory language is repeatedly followed by prescriptions and limitations that clearly do more than provide mere "guidance." This formulation starts out early in the document and continues throughout. For example, Section A.3 Mapping Coastal Hazards, states in permissive form, that local governments "may consider using LCP coastal hazards maps . . . in lieu of site-specific coastal hazards reports," but that permissive language is followed immediately by the prescription that such maps can be used only "if the CDP includes requirements to minimize impacts . . . including requirements that property owners accept the risk . . . and agree to remove [their] development subject to appropriate future triggers." The Section then goes on to state: "The [***insert name of City or County***] shall map areas subject to existing and future coastal hazards that will be exacerbated by sea level rise and that present risks to life and property. These areas require additional review and regulation to minimize risks and protect coastal resources." (Underlines added.)

****
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TELEPHONE: (415) 383-5600 FACSIMILE: (415) 358-5674

Another example in Section A is the following statement in Section A.5: "Coastal Hazard Reports required pursuant to Policy A.4 (Site-specific Coastal Hazard Report Required) shall include analysis of the physical impacts from coastal hazards and sea level rise . . . ." (Underlines added.)

Examples of this kind of mandatory language are replete in the document, with the clear intention of providing not simply "guidance," but rather specific directions to local governments regarding the permissible, and impermissible, provisions in their LCP's. This is made clear in the Introduction where, on page 4, it is stated: "One of the Commission's top priorities is to coordinate with local governments to complete and update LCPs in a manner that adequately addresses sea level rise and reflects the recommendations in this document." (Underlines added.)

This not the first time that the Commission has utilized the practice of publishing a so-called "guidance" document, and then using that document as a basis for evaluating LCP's and specifically coastal permit applications submitted pursuant to those LCP's. In 2015 the Commission adopted its Sea Level Rise Policy Guidance, which also had been criticized for attempting to impose regulations in the guise of a "guidance" document. Numerous commentators, including this writer, had called attention in 2015 to the illegality of the Commission's attempt to by-pass the procedures required in adopting regulatory provisions by the expedient of adopting a "guidance" instead.

The Commission's subsequent misuse of the 2015 Sea Level Rise Policy Guidance can be seen by the fact that at least two, and possibly more, applications by Seadrift property owners for coastal permits in 2016 were met with the evaluation of those applications by Commission staff based on the applications' consistency (or lack thereof) with that so-called Guidance document. For example, in a letter dated March 31, 2016, Coastal Commission Planner Shannon Fiala wrote to a Seadrift applicant for a coastal permit and instructed the applicant, in part, as follows:

> Please provide an analysis of anticipated impacts from coastal hazards, including sea level rise, over the anticipated lifetime of the development. The steps recommended in the Coastal Commission's Adopted Sea Level Rise Policy Guidance (2015) may be used as a reference. These steps include: [the letter then goes on to specify 5 specific requirements, all drawn from the Guidance document].
>
> [The letter then goes on to state] Step 2 shall include an engineering analysis, prepared by a licensed civil engineer with experience in coastal processes, for the proposed development site. The analysis shall consider changes to the groundwater level, inundation, flooding, wave run-up, and erosion risks to the site that may occur from both the lagoon and ocean side of the site, as applicable, over the expected economic life of the development, assuming a 100-year storm event occurring during high tide, without existing shoreline armoring, and under a range of sea level rise conditions . . . . At a minimum, the submitted report shall provide: (1) maps/profiles of the project site that show long-term erosion, [etc., etc.].

A second Seadrift coastal permit applicant in received an almost identical list of requirements for their application. There are probably others of which I am not aware at this time.

What is significant about the manner in which the Commission staff evaluated the coastal permit applications is that the evaluations were not based upon language appearing in the Marin County LCP, but rather they were based on policies laid out in the Commission's 2015 Sea Level Rise Policy Guidance document. Clearly that so-called "guidance" was viewed by Commission staff as dictating specific requirements for coastal permit applications.

The current draft violates the same legal principles that were violated by the earlier 2015 "guidance" document, and the same criticisms that were leveled at that document apply equally here as well. Thus, one commentator regarding the 2015 document called attention to the specific legal principles that were being violated in the following way.

> Many aspects of this "Guidance" constitute "underground rulemaking", in violation of the Administrative Procedures Act (APA). Section 11342.600 of the Government Code defines "regulation" as "every rule, regulation, order, or standard of general application . . . adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure." Every "regulation" is subject to the rulemaking procedures of the APA unless expressly exempted by statute. Government Code Section 11346. If a rule looks like a regulation, reads like a regulation, and acts like a regulation, it will be treated by the courts as a regulation, whether or not the issuing agency so labeled it. *State Water Resources Control Board v. Office of Administrative Law*, 12 Cal.App.4th 697 (1993). Any doubt as to the applicability of the APA should be resolved in favor of the APA. *Grier v. Kizer*, 219 Cal.App.3d 422 (1990).

In order to comply with the law, the Draft Residential Adaptation Policy Guidance must be amended throughout in order to make clear that the "guidance" is merely that, and the provisions which now are written in mandatory language and which appear to dictate what the Commission staff will interpret as requirements to be included in future LCP's as well as in future coastal permit applications must be removed throughout the document.

Sincerely,

Peter B. Sandmann

Peter B. Sandmann

PBS:me

cc: Brian Crawford, Director, Marin County Community Development Agency
Jack Liebster, Planning Manager, Marin County Community Development Agency
ResidentialAdaptation@coastal.ca.gov

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

701 OCEAN STREET - 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD/TTY: CALL 711

KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

September 28, 2017

Email: ResidentialAdaptation@coastal.ca.gov

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Subject: Santa Cruz County Comments on Draft Residential Adaptation Policy Guidance

Dear Sea Level Rise Working Group:

Please accept these comments from the Santa Cruz County Planning Department on the Draft Residential Adaptation Policy Guidance. These comments focus on two sections of the report, Background and Legal Considerations, with the comments regarding Legal Considerations having implications connected to several model policies in Section 7 of the document.

Background

Sea level rise will cause passive beach erosion as the shoreline migrates landward behind a fixed structure. However, in the background section the document should acknowledge it is not always the case that fixed or permanent development will cause active beach erosion. A study in northern Monterey Bay found that coastal protection structures had no long term effects on active erosion of adjacent beaches. The document should provide that active beach erosion and other potential impacts may need to be studied on a case-by-case basis[1].

Legal Considerations - Relevant Coastal Act Policies

In Santa Cruz County many homes protected by existing coastal protection structures have been significantly remodeled, added onto, and reconstructed (redeveloped) over the years under our existing LCP approved in 1994. The required coastal bluff setback calculation for these projects takes into consideration the capacity of an existing coastal protection structure to reduce or eliminate the coastal bluff erosion rate. However, the current LCP also requires all of these projects to maintain a minimum 25-foot setback from the edge of the coast bluff. The County is developing updated LCP policies to require these types of projects to address future sea level rise. An important element in our update is the ability to condition these projects to achieve outcomes that will 1) internalize future projected costs of relocation, removal, and

1 Gary Griggs, Interaction of Seawalls and Beaches: Eight Years of Field Monitoring, Monterey Bay, California, 1986-1995, Sanctuary Integrated Monitoring Network, http://www.sanctuarysimon.org/projects/project_info.php?projectID=100253&site=true

restoration, 2) mitigate existing impacts related to a coastal protection structure, and 3) mitigate future impacts caused by sea level rise.

The interpretation proposed in the Draft Guidance document, that existing development means development that was in existence as of 1/1/1977, is a new interpretation that would severely hamper the County's ability to achieve these outcomes. The document states this new definition is the most reasonable interpretation to "harmonize" Sections 30235 and 30253 and "evinces" a broad legislative intent. However, this new interpretation is actually a change from 23 years of past practice in Santa Cruz County under our existing approved LCP. This history demonstrates it has been deemed both reasonable and consistent with the Coastal Act to allow redeveloped structures to rely on existing approved coastal protection structures. The new definition and the interpretation of how it harmonizes Sections 30235 and 30253 (i.e. a redeveloped structure could not rely on an existing approved coastal protection structure) would change past practice and eliminate the County's ability to propose innovative ways to leverage redevelopment projects to achieve outcomes that internalize future projected costs, mitigate existing impacts, and mitigate future impacts caused by sea level rise. The new definition would largely prohibit redevelopment of structures on coastal bluffs and beaches and eliminate a key opportunity to achieve these desired outcomes. Moreover, many existing coastal protection structures are adjoined by contiguous structures on other properties, and removal or lack of maintenance could adversely affect neighboring properties.

Because the new definition of an existing structure has not been the interpretation in the past, before sea level rise became a significant issue, the document should describe this as a new or alternative definition that local jurisdictions may consider while crafting LCP updates to address sea level rise. In addition, the model policy language in Section 7, Policies B.1(c), B.3, B.5, F.5, F.6, and F.9 (i.e. a redeveloped structure could not rely on an existing approved coastal protection structure) should be modified accordingly to provide greater flexibility. Local jurisdictions should be able to take into consideration the capacity of an existing approved coastal protection structures to reduce or eliminate coastal bluff erosion when calculating the required setback for a project involving redevelopment of an existing residential structure. Again, this provides the opportunity through conditions of approval to achieve the key goals of internalizing future projected costs, mitigating existing impacts, and mitigating future impacts caused by sea level rise. This would be consistent with the position expressed at the beginning of the document that the Guidance is advisory, and it would be consistent with the position expressed by the Commission that the Guidance provide flexibility to local jurisdictions on how the Guidance is incorporated into LCP updates.

Thank you for the opportunity to comment.

Sincerely,

David Carlson
Resource Planner

BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

BCPUD BOX 390 270 ELM ROAD BOLINAS CALIFORNIA 94924 415 868 1224

September 29, 2017

via email: ResidentialAdaptation@coastal.ca.gov

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street
Suite 2000
San Francisco, California 94105

Re: BCPUD Comments on the California Coastal Commission Staff's Draft Residential Adaptation Policy Guidance

Dear Commissioners:

On behalf of the Board of Directors of the Bolinas Community Public Utility District ("BCPUD"), a small special district on the West Marin coast providing water, sewer, solid waste disposal and related utility services to the unincorporated community of Bolinas, I am submitting this letter of comment on the Coastal Commission Staff's Draft Residential Adaptation Policy Guidance ("Draft Policy Guidance"). **We urge the Commission *not* to formally adopt the Draft Policy Guidance as "interpretive guidelines" (or otherwise) by which coastal communities' updates to their Local Coastal Plans ("LCPs") will be assessed.** Instead, we urge you to continue to follow the clear mandate of the Coastal Act and limit your review of coastal communities' LCP updates to an "administrative determination that the land use plan submitted by the local government does, or does not, conform with the requirements of Chapter 3." *Coastal Act Section 30512.2.*

First, it is important to acknowledge what the Draft Policy Guidance is not. As the Coastal Commission staff acknowledges on the *How to Use this Document* page, the Draft Policy Guidance is not a regulatory document nor does it have any force of law as a standard of review. (Despite this, we are aware that Coastal Commission staff want versions of the model policies contained in the Draft Policy Guidance to be included in Local Coastal Plan updates currently underway in California, without the opportunity for any meaningful public input from affected communities. Marin County's update of its Local Coastal Plan has been stalled for the last two years for precisely this reason). This is as it should be because enacting new state law is the province of the California Legislature, not administrative staff, and the California Legislature has not amended the Coastal Act to require any of the "model policies" contained in the Draft Policy Guidance for inclusion into individual Local Coastal Plans. Because local jurisdictions best understand their coastal resources, the ecosystems therein, and the needs of their communities, they should retain the broad discretion bestowed upon them for this very reason in Chapter 3 of the Coastal Act to determine the content of their LCPs.

Second, the Draft Policy Guidance asserts that maintaining residential development adjacent to the coast is a "new threat to public access" because such maintenance "will cause the narrowing and eventual loss of beaches, dunes and other shoreline and offshore recreational areas" and "presents a significant environmental justice issue, if residents continue to enjoy shoreline access while the general public is blocked from accessing the shore." To the contrary, we assert that there is great injustice presented by guidelines that prevent or severely burden

coastal residents from maintaining or protecting their homes, and by doing so the guidelines contravene the underlying Legislative Findings and Declaration in Section 30000 et seq. of the Coastal Act. The following provisions are particularly germane:

> Section 30001: "The Legislature here by finds and declares . . . (d) [t]hat existing developed uses . . . are essential to the economic and social well-being of the people of this state and *especially to working persons employed within the coastal zone*." (emphasis added)
>
> Section 30001.5: "The Legislature further finds and declares that the basic goals of the state for the coastal zone are to . . . (b) [a]ssure orderly, *balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people* of the state." (emphasis added)
>
> Section 30001.5: "The Legislature further finds and declares that the basic goals of the state for the coastal zone are to . . . (c) "[m]aximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and *constitutionally protected rights of private property owners*." (emphasis added)
>
> Section 30001.5: "The Legislature further finds and declares that the basic goals of the state for the coastal zone are to . . . (e) "[e]ncourage state and local initiatives and cooperation in preparing procedures to implement coordinated *planning and development for mutually beneficial uses* . . . in the coastal zone." (emphasis added)

In other words, the commendable public access objectives of the Coastal Act are to be carefully balanced with the equally commendable objectives of preserving coastal resources *as well as* the social and economic well-being of persons living and working in the coastal zone. The Draft Policy Guidance does not achieve this required balance.

The "redevelopment" section of the Draft Policy Guidance – whereby staff proposes to redefine home remodels as well as home repair and maintenance activities as "redevelopment" equivalent to "new development" under the Coastal Act -- is particularly overreaching and without support in the Coastal Act. Section 30212 of the Coastal Act specifically defines what is *not* new development and Section 30610 defines what does *not* need a coastal development permit, including but not limited to improvements to existing family residences, repair and maintenance activities, and replacement of any structure destroyed by disaster. The Coastal Act clearly states that requiring a coastal development permit for these activities may only be made *by the Commission* for specific, narrowly tailored reasons and *by regulation* (and the public policy process that entails), not through the backdoor of "interpretive guidelines."

The "assumption of risk" section of the Draft Policy Guidance similarly is overreaching and essentially requires property owners in the Coastal Zone of California to assume risks and obligations – such as the expense of removing or relocating structures if "required pursuant to adaptive planning requirements" -- that property owners subject to hazards elsewhere in the United States (*e.g.,* New Orleans, Louisiana, Houston, Texas and the West Coast of Florida)

presumably do not shoulder. In an effort to better understand the Draft Policy Guidance, and particularly this "assumption of risk" section, we watched the staff webinar presented on August 2, 2017 (and available on-line). During the "Q&A" session following the staff presentation of the Draft Policy Guidance, a question was asked as to the Commission's position on existing coastal development. The staff member responded as follows:

> "[t]he Coastal Act sets up this structure of slowly moving development out of hazards' way, out of areas that require shoreline protection. That is built into the Coastal Act itself, which is the standard of review. This guidance describes a little bit more and provides some tools for how to address that given development patterns."

We respectfully submit that the Coastal Act does not set up such a structure. As stated above, the Coastal Act sets forth a carefully balanced approach to preserve public access, coastal resources, *and* coastal communities. There is no provision of the Coastal Act that legislates a "managed retreat" approach. While it may well be that such an approach is sound public policy, that decision is the province of the California Legislature, with public input and the opportunity for affected communities to participate in the process. The concept of managed retreat was born of the relatively newly acknowledged process of sea-level rise driven by climate change. Sea-level rise and its implications deserve close study and the development of public policy to minimize harm. However, this significant task should not be undertaken via a "guidance" document that essentially re-writes state law. The implications of sea-level rise warrants a much deeper engagement by the California Legislature, taking into account all alternatives as well as the needs and rights of coastal residents and communities.

Coastal communities such as ours are struggling to survive the affordable housing crisis (which only will be made worse by the draconian and expensive "redevelopment" and "assumption of risks" approaches contained in the Draft Policy Guidance), the impact of unmanaged tourism on coastal roads and small special district public services (such as wastewater systems and garbage facilities), and the assault on agricultural land uses in the Coastal Zone. Rather than help protect our coastal communities as the valuable "coastal resources" they are, the Draft Policy Guidance instead imposes complicated and *ultra vires* obligations upon us. We urge the Coastal Commission not to adopt the Draft Policy Guidance as interpretive guidelines by which coastal communities' updates to their LCPs will be assessed.

Thank you for this opportunity to submit our comments.

Very truly yours,

Jennifer Blackman
General Manager

City of Del Mar

September 29, 2017 VIA EMAIL AND MAIL

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

SUBJECT: Coastal Commission Draft Residential Adaptation Policy Guidance

Dear Members of the Coastal Commission Sea Level Rise Working Group,

Thank you for the opportunity to comment on the draft Residential Adaptation Policy Guidance. Members of the Del Mar City Council and City staff viewed your recent webinars and presentations to the Coastal Commissioners. We appreciate the on-going coordination between our agencies and would like to take this opportunity to comment on how the Commission's Policy Guidance could affect Del Mar residents, owners, and the City itself.

The main takeaway at this point is that any adaptation plan developed to meet state requirements must be afforded the opportunity to account for and adapt to the unique circumstances and constraints within the local context. We agree with the Coastal Commission approach to customize adaptation strategies to local conditions. In Del Mar, we have unique neighborhood features and vulnerabilities that must be accounted for relating to coastal bluffs, the San Dieguito Lagoon, low lying floodplains affected by the San Dieguito River, a century-old beach front neighborhood subject to both coastal and river flooding, and public facilities and infrastructure.

Del Mar is currently looking into available options for development of a local Adaptation Plan; and the draft Policy Guidance, webinars, and Coastal Commission discussion on this topic have been helpful in that regard. That being said, the City has not and will not commit to any specific direction until the City Council has had a chance to review and consider the options. Through our own multi-year process we have learned there must be robust public dialogue regarding the various adaptation options available. Del Mar established a technical advisory committee in 2015 to provide a public forum to help engage the public to discuss and consider adaptation strategies and provide input. The City plans to use this forum to further engage the community and increase participation prior to formulating draft Local Coastal Program (LCP) documents.

We are getting substantial feedback, particularly from owners in areas of projected flooding and erosion-related impacts. The following concerns are a sample of what we are hearing in regards to unique local characteristics and options for adaptation in Del Mar:

- Provide a full toolbox of adaptation options for future decision makers to choose from
- Prioritize beach nourishment and sand replenishment
- Maintain a walkable beach for as long as possible
- Avoid conflicts with Del Mar's 1988 "Beach Preservation Initiative"(BPI)- the community's desired regulations to protect the beach for present & future generations
- Maintain the certified LCP allowance for seawalls of certain design to be built, repaired, and maintained per the BPI to protect existing structures in the beach neighborhood
- Beach front seawalls serve a key functional role in Del Mar to protect structures and coastal access by minimizing coastal flooding in adjacent low lying floodplain areas
- It is too soon to plan for retreat of any structures on private property in Del Mar
- Managed retreat is not feasible for the century-old Del Mar beach neighborhood
- Bluff adaptation options will vary depending on whether railroad tracks are relocated

In closing, the City would like to emphasize the importance of accounting for the local context in the Commission's sea level rise policy guidance. We have been advised this is an untested area of the law and it is critical that local jurisdictions be afforded flexibility to consider a phased approach that will allow for conflict resolution at the local level where possible. It is crucial that we work together to maintain a predictable process for development review with reasonable requirements that can adapt to changing environmental conditions and that will allow the City to nimbly move forward with the planning needed to respond for public property when the level of severity and risk has increased to the specified level of significance, and to provide that same flexibility for private owners to make decisions in regards to vulnerable private property. Thank you for your consideration.

If you have follow up questions, please contact Del Mar Planning staff at: (858)755-9313, or via email kgarcia@delmar.ca.us or alee@delmar.ca.us

Sincerely,

Terry Sinnott
Mayor

Matella, Mary@Coastal

From: Laura DeMarco <laurastanleydemarco@yahoo.com>
Sent: Saturday, September 30, 2017 12:00 AM
To: ResidentialAdaptation@Coastal
Subject: Comments on draft Sea Level Rise Adaptation Residential Guidance

Dear members of the Coastal Commission Sea Level Rise Working Group,

It is important that each city's Adaptation Plan be able to be tailored in recognition of the distinct context and history of each community's residential beach development, unique topography, and applicable voter-approved initiatives that are already part of their previously certified LCP.

A case in point is Del Mar's Beach Colony that stretches along the ocean for almost a mile from the 1700 block of Ocean Front to the mouth of the San Dieguito River. It is one of the oldest and most historic residential neighborhoods in San Diego County. The plot maps for the development of this area were laid out over 100 years ago by legendary South Coast Land Company developer Col. Ed Fletcher. Many Del Mar beach houses date back to the 1920s and 1930s so they are considered historic structures. The vast majority were built before the Coastal Act was enacted in 1976.

As an example of the deep and historic roots in Del Mar's Beach Colony, Col. Fletcher's 120+ descendants recently celebrated their 92nd reunion at their annual July 4th party hosted on the 1800 block of Ocean Front, the site of Del Mar's first beach house as shown in this article and video:

http://www.sandiegouniontribune.com/lifestyle/people/sd-me-fletcher-reunion-20170704-story.html

Unlike most residential beach communities in California, Del Mar's oceanfront houses are at a higher elevation than the entire 30-block landward residential area behind them which includes hundreds of houses and multi-family units, the old coast highway (now Camino del Mar and Coast Blvd), access streets, public parking, public recreational facilities, electrical grid and sewer system. The shoreline protection provided by these oceanfront houses during extreme storm surge prevents the entire Beach Colony from turning into a lake because almost the entire 30- block landward area is in a FEMA flood zone.

The public access requirements in the Coastal Act include not only protecting the adjacent public streets and parking, so the public can come and park to access the beach, but also the houses and multi-unit structures which are the primary source of Del Mar's historic vacation rentals providing visitor-serving accommodations.

The houses, duplexes, condominiums and apartment buildings in this lower lying food-zone area have hosted vacationing families for generations. It is an important public resource as the primary location of most of the City's vacation rentals which provide over 100 visitor-serving accommodations (totaling over 300 bedrooms) with direct beach access. These are the only visitor-serving accommodations with direct beach access since there is only one hotel, the Del Mar Beach Motel, with only 44 rooms in the entire Beach Colony. Public

recreational facilities in this flood zone area include bike lanes along the old coastal highway linking La Jolla to Solana Beach, two public tennis courts and a basketball court.

The shoreline protection (sand replenishment, seawalls, rip rap, etc.) needed to protect oceanfront properties and the public facilities and hundreds of homes and units in the lower elevation, 30-block landward flood-zone behind them is specifically authorized by the Beach Protection Initiative (BPI) passed by Del Mar voters in 1988 and incorporated in the following guidelines that are already part of Del Mar's certified LCP:

http://www.delmar.ca.us/DocumentCenter/View/620

The City of Del Mar and its voters recognize the need for protective shoreline structures which is why the City has approved seawalls along the entire Beach Colony oceanfront and public street ends. This is also why nowhere in the voter-approved BPI or the implementing Beach Overlay Zone Ordinances (BOZO) is there a provision for removal of shoreline protection and "managed retreat" since it is not feasible as it would endanger the entire lower lying 30-block Beach Colony area, a significant part of the City's property tax base with over $1B in current market value; a major coastal highway providing public access; and public facilities and utilities including the sewer system that would contaminate flood waters, the lagoon and ocean.

In summary, the Commission's Sea Level Rise Adaptation Residential Guidance should allow Del Mar's Adaptation Plan to include the voter-approved BPI that protects our historic, visitor-serving Beach Colony.

Thanks for your consideration,

Laura DeMarco
544 Avenida Primavera
Del Mar, CA

Sent from my iPhone

RESOURCE MANAGEMENT AGENCY

county of ventura

Planning Division
Kimberly L. Prillhart
Director

September 29, 2017

California Coastal Commission
Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Subject: Comment Letter Regarding Draft Residential Adaptation Policy Guidance

Dear Coastal Commission Sea Level Rise Working Group:

Thank you for the opportunity to submit comments regarding the draft Residential Adaptation Policy Guidance (Residential SLR Guidance) released on July 28, 2017. Advanced planning guidance, such as this Residential SLR Guidance, is useful to ensure the preservation of our precious coastal resources for future generations. Also, the guidance is helpful because it conceptualizes the options that may be available to local municipalities. The timing of this guidance is beneficial because it coincides with the County of Ventura's Coastal Commission/Coastal Conservancy grant-funded efforts to update its Local Coastal Program and continue efforts to adapt to sea level rise.

We look forward toward continued coordination with Coastal Commission staff on the grant project, and more detailed, area-specific guidance would be appreciated. For example, in our local context, it is unclear if the shoreline can truly be restored and allowed to retreat on the North and South Coasts of the unincorporated area. Thin tracts of residential development lie along Pacific Coast Highway that are generally protected by shoreline protective devices. There is limited room for highway retreat due to a natural environment characterized by steep, geologically unstable topography. It would also be costly to remove sewer and water infrastructure that is aligned with the highway. For these reasons, it is likely that local agencies and Caltrans would elect to continue to protect and maintain Pacific Coast Highway. It is uncertain if the benefits would outweigh the costs of having shoreline protective devices located seaward of the homes, as they are today, compared to implementing the Residential SLR Guidance that would phase-out residential development in order to allow a few feet of retreat and result in a generally similar configuration of shoreline protective devices that are located seaward of the highway.

In addition to the general concerns regarding the costs and benefits of the tradeoffs described above, the following detailed comments are for your consideration:

- The addition of Coastal Commission staff comments written below each policy would be helpful to describe the intent, define terminology, and provide insight. For example, are policies pertaining to groundwater changes relevant to development served by on-site septic systems (see Policies B.1(b) and F.10(1)? What would site restoration entail if a residence is removed due to hazards (see Policy B.2)? Are there any examples of a shoreline protective device that did not substantially alter existing landforms (see Policy B.2)? What is a horizontal levee (see Policy E.2)?

- Rather than crafting policies to curtail use after the anticipated lifetime of the development (e.g., an 80-year period for residential units), the policies should be based on redevelopment that exceeds the 50% threshold, public trust land boundaries associated with the shifting mean high tide line, or repetitive loss. Many of the existing residential units in our jurisdiction are nearing the recommended 80-year lifespan threshold, yet they were authorized through a Planned Development permit that does not expire and are still viable structures that have been well maintained over time. Policies that seek to curtail reasonable use of land designated for residential use after 80 years may catalyze takings claims.

  One of the incentives for local decision-makers to adopt sea level rise policies is to reduce legal liability, and it may be difficult to garner support for policies that subject the County to additional liability (see Policy D.1 (c), and (d)). For property encroached upon but not yet encompassed by the public trust land boundary, the guidance would require Planning staff to decide between allowing reasonable economic use and actions that could constitute a legal taking (see Policy B.10). Policy D.1(d) cannot simply require removal of residential units that have a vested right to exist. These determinations are typically adjudicated in the courts.

- The Residential SLR Guidance should provide a pathway to allow the siting and design alternatives analysis (see Policies C.1, F.3, and E.2) and other technical studies such as the shoreline armor monitoring plan (Policy F.8) to be conducted at the neighborhood scale rather be repeated for every project. Under conditions where tracts of residentially designated land with small parcel sizes inherently restrict parcel-specific siting and design alternatives, or share a common shoreline protective device, the same analysis should not be required to be repeated for each parcel when the results of the analysis would essentially be the same.

- There should be more guidance regarding how existing development can be modified to improve safety and resiliency. For example, the Residential SLR Guidance calls for residences that are redeveloped to forego shoreline protective structures, but if there are adjacent properties with seawalls, perhaps the redeveloped residence could be rebuilt with caissons until the mean-high tide line encompasses the property?

- Are there any recommendations with regards to the use of emergency permits that have historically been used to authorize shoreline protective devices and commonly resulted in permanent shoreline armory? For example, would shoreline protective devices that are erected when an emergency permit is granted conflict with repetitive loss policy G.7?

- Finally, the guidance should clarify that local governments will not be expected to solely incur the costs of sea level rise adaptation programs, particularly with regard to the creation of programs to implement special assessment districts, in-lieu fees, mitigation banks, amortization lease-back, and incentive programs such as transfer of development rights (TDR). State and federal funding should be provided for planning and implementation.

Thank you again for the opportunity to comment. We recognize that tremendous work remains to determine how to apply this guidance to specific locales and to craft a comprehensive sea level rise adaptation plan. We hope that Coastal Commission staff interprets its guidance with flexibility as we coordinate to resolve complicated sea level rise challenges. Please do not hesitate to contact me directly at (805) 654-2936 should you have any further questions on the above.

Sincerely,

Aaron Engstrom

Aaron Engstrom, Senior Planner
Long-Range Planning Section

C: Chris Stephens, Ventura County Resource Management Agency Director
Kim L. Prillhart, Ventura County Planning Division Director
Tricia Maier, Long-Range Planning Manager, Ventura County Planning Division
Jennifer Welch, Residential Permit Manager, Ventura County Planning Division

Matella, Mary@Coastal

From: Gagneron, Elizabeth@SCC <Elizabeth.Gagneron@scc.ca.gov>
Sent: Friday, September 29, 2017 11:09 AM
To: ResidentialAdaptation@Coastal
Subject: SCC comments on draft Residential Adaptation Policy Guidance

The Coastal Conservancy would like to submit comments on the Coastal Commission's draft Residential Adaptation Policy Guidance to express our support of soft shoreline techniques and provide information on the success of this approach.

Living Shorelines have been shown to be a successful national method of a combined natural bank stabilization and habitat enhancement approach that can also be utilized as a climate adaptation strategy in low- to medium-energy coastal and estuarine environments. Integrated Living Shoreline approaches have been successfully tried and tested by USFWS, NOAA and other partners for more than two decades on the East Coast and the Gulf Coast, and since 2012 by the California State Coastal Conservancy and multiple local, state, federal, and non-profit partners at multiple sites in San Francisco Bay and the open coast in San Diego, Newport, and Humboldt Bay. The projects have resulted in increased wave attenuation benefits, sediment stabilization and shoreline protection, and habitat restoration and enhancement for fish, mammals, birds, and a wide variety of aquatic species. Re-linking native habitat types in a multi-objective, multi-habitat approach improves habitat connectivity and exchange of propagules, food resources, wildlife corridors, and physical shoreline values.

We are very supportive of nature-based approaches and green infrastructure to building resilience to sea level rise. If you have any questions, please do not hesitate to contact me.

Liz Gagneron
CA Sea Grant Fellow, Climate Ready Program
State Coastal Conservancy
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Elizabeth.Gagneron@scc.ca.gov

Matella, Mary@Coastal

From: Terry Houlihan <terryjhoulihan@gmail.com>
Sent: Friday, September 29, 2017 1:25 AM
To: ResidentialAdaptation@Coastal
Cc: Kiren Niederberger; Jeff Loomans; Peter Sandmann
Subject: Houlihan Comments on Draft Residential Adaptation Policy Guidance dated July 28, 2017

Commissioners,

I submit these comments as an owner of a house in the Coastal Zone constructed after January 1, 1977. Something is rotten in the state of the Commission. The Draft Residential Adaptation Policy Guidance (DRAP) together with its companion 2015 Sea Level Rise Policy Guidance (SLRP) together run for hundreds of pages. Nowhere do they reveal that key policies proposed are based on interpretations of Coastal Act (Public Resources Code or PRC) sections 30235 and 30253 entirely new to the Commission. Neither document mentions that these interpretations are **just the reverse** of the Commission's prior interpretation explained and defended as recently as 2006 in Surfrider Foundation v. California Coastal Commission, Case A110033 in the California Court of Appeal, First Appellate District. Neither document explains why interpretations of the law advocated by Surfrider in that case, and **opposed** by the Commission, are now announced, ex cathedra and without explanation, as the Commission's interpretation of these key sections.
Based on the untenable Surfrider interpretation of the law, the DRAP constructs policies that place the interests of owners of now existing structures in the coastal zone behind the interests of various public uses of the zone. Both interests are equally important under the Coastal Act—one does not take priority over the other. The DRAP advocates policies that place public and private rights unnecessarily in conflict, rather than developing policies designed to encourage all to work together to address the challenge of sea level rise.
As written, the Coastal Act generally, and sections 30235 and 30253 in particular, treat new development and existing structures differently. New development is subject to significant restrictions to protect the coastal zone. Once constructed, however, homes are entitled to protection from coastal hazards. The DRAP tries in various ways to eliminate owners' rights under the Act to protect their homes. The DRAP should be rejected by the Commission and sent back for a rewrite consistent with the law.

The DRAP does not reveal that the Commission's new interpretation of the PRC 30235 is a *complete reversal* of its own earlier, long standing interpretation, and when presented to the state legislature last year, failed passage.

At 16, the DRAP asserts that "existing" development entitled to shoreline armoring if necessary under PRC 30235 "only applies to development that existed as of January 1, 1977." For this interpretation the Draft cites only the SLRP, another "policy document" not subject to judicial review.

As recently as 2006, in the California Coastal Commission brief filed in the Surfrider case (hereafter CCC Surfrider brief), Commission attorneys explained cogently and in detail that "existing structures" entitled to section 30235 rights, including a permit for armoring if needed, meant any structure existing **at the time of a permit application**.

I incorporate in my comments on the DRAP the Commission's own discussion in the CCC Surfrider brief regarding the meaning and scope of section 30235, particularly the discussion at pages 14-18, and 21. As of 2006 "The Commission [was] not aware of a single instance of the Coastal Act in which it has determined that 'existing structures' in section 30235 refers only to structures that predated the Coastal Act." *Id* at 21.

The failure of the DRAP—and the SLRP that preceded it— to discuss fully and fairly the Surfrider Foundation case and the history of this remarkable change in CCC's reading of the law renders the DRAP fundamentally dishonest.

The DRAP also fails to mention that *after* the Commission's radical reversal of its interpretation of PRC 30235 in the SLRP, AB 1129 (Stone) was introduced in the state legislature to confirm this new interpretation, but did not pass.

Section 2(b) of AB-1129 proposed to amend existing law by providing that an "existing structure" entitled to a permit under section 30235 "means a structure that is legally authorized and in existence as of January 1, 1977." That is, of course, precisely the interpretation set forth at page 16 of the DRAP. AB-1129 failed to pass and died in the legislature's inactive file.

The same result obtained in 2002 when a similar proposed amendment failed to pass and died in the inactive file. See CCC Surfrider brief at 19, note 6. That Commission brief argued that the failure of legislation to amend the Coastal Act supported the Commission's then existing interpretation of section 30235—that it applies to any structure existing at the time of a permit application under it. That argument is doubly true today after two failures to get the legislature to change the law.

If we were writing on a clean slate, would it make sense to limit rights to permits for shoreline protective devices to structures built before January 1, 1977? None whatsoever. Structures legally built after January 1, 1977 (and, accordingly, with Coastal Commission permits) are at least as deserving of protection as earlier structures. Moreover, they are by definition newer, very likely more valuable and more important to the "economic and social well-being" of Californians than earlier structures. Whatever the correct approach to sea level rise may be, it makes no sense to treat new structures less favorably than old under the law.

The DRAP and SLRP fail to disclose that the Commission's new reading of PRC 30253 is contrary to both its plain language and the Commission's own interpretation in its *Surfrider* brief.

Various policies proposed in DRAP section 7B and Adaptation Strategies proposed in SLRP Chapter 7 are based on a new, expansive reading PRC 30253. As explained in the CCC Surfrider brief, however, that section of the statute imposes a number of requirements, solely on "new development." "It does not govern already existing development." Surfrider Brief at 15. Ignoring these statutory limits, the DRAP policies would extend the 30253 requirements to any new development or "redevelopment" that would require any protective devices anywhere along the coast.

Several DRAP Section 7 policies are designed to:

1) make sure that any new development permitted never becomes entitled to the protection PRC 30235 gives to "existing structures" and

2) amend PRC 30253's provision regarding construction of protective devices by deleting its "along bluffs and cliffs" language and extending its coverage to any "new development," "redevelopment" or "addition."

3) establish a new regime of "retreat" strategies not based on any provision of the Coastal Act.

These proposed policies should not be adopted as they are contrary to the plain meaning of the statute, as passed and as read by the Commission until now.

The DRAP fails to disclose that state legislature also declined to adopt essential policies that the DRAP proposes.

Section 1 (b) of AB 1129 (Stone) also proposed to express "the intent of the Legislature to provide clear direction and enhanced authority to the California Coastal Commission to maximize the use of natural infrastructure to protect the state's coastline, while minimizing the use of coastal armoring and its related negative impacts." As discussed above, that legislative approval was denied.

Coastal Armoring Is Not Inherently Evil.

The DRAP discussion of hard shoreline armoring at 12-13 is one-sided, indeed Orwellian, in its listing of negative impacts. As the CCC Surfrider Brief demonstrates, shoreline armoring may be subject to reasonable design and mitigation conditions that result in a net benefit to public access and use. In that case the armoring protected an important public viewpoint as well as private structures. CCC Surfrider Brief at 6. Mitigation conditions both improved public access to the view site and expanded public access seaward of the seawall. CCC Surfrider Brief at 7. All of this was accomplished within the limits imposed on the Commission by PRC 30235. This example shows what should be obvious—that there should be no blanket policy condemnation of any particular approach to protecting existing structures.

The DRAP and the SLRP are dishonest attempts to drag coastal counties into litigation on the side of new, flawed CCC policies.

The Commission could adopt these "policies" as regulations. If it did so, however, those regulations could be challenged in court. Many would be voided since they conflict with provisions of the state law, conflicts highlighted by the Commission's flip-flop interpretations. Instead, these two "policy" documents seek to compel coastal counties to adopt local use plans that incorporate provisions that conflict with the express provisions of the Coastal Act. That would inevitably lead to each county being sued to test whether their local ordinance is preempted by the state law. Such multiple, expensive lawsuits could be avoided if the CCC had the courage to promulgate its ideas in a form where they could be tested in court. Instead, without revealing or discussing the problems underlying these policies, the Commission seeks to dupe counties into passing ordinances that, for example, try to limit section 30235 rights to structures "existing as of January 1, 1977." DRAP at 50 Policy F1.

The DRAP fails to discuss state preemption law.

The DRAP and SLRP are designed to induce coastal counties to adopt ordinances that comply with their policies. Given that purpose, the DRAP is also misleading because it fails to discuss California law on preemption of local ordinances by state law. There is well developed law in California that local ordinances which "conflict" with state law can be voided on that ground. Such conflicts between DRAP policies and existing law are inherent and should be considered before any policy is adopted in an ordinance.

Proposed policies on "Redevelopment" should be rejected.

The Coastal Act calls for substantial review of *new* development and protection of *existing* development. It does not address "redevelopment." There is no valid basis for the DRAP policy B.7 addressing maintenance and improvements of existing structures. The attempt to treat remodeling as "new development" is contrary to both PRC 30001(d) and 30253, which do not mention remodeling.

DRAP section B.7 and SLRP Chapter 7, para. A.13, introduce a new concept of "redevelopment" that transforms existing structures entitled to PRC 30235 rights into properties not entitled to such protection. Further, "Rebuilding and redevelopment restriction strategies could be used to limit a property owner's ability to rebuild or renovate a structure located in a sea level rise hazard zone." DRAP at 8. California may be on the "left coast" but this is not mainland China. Nothing in the Coastal Act contemplates restrictions on an owner's ability to rebuild or renovate homes in the Coastal Zone. The impact of the "redevelopment" provisions is pernicious on existing Coastal Zone homes, such as mine.

If a remodel crosses the line to "redevelopment", then the permit can only be issued on terms that require the owner to waive his or her existing rights under PRC 30235 to have the shoreline altered to protect the structure. DRAP sections B.7 and A.6. Such a permit would also require burdensome and unnecessary studies of future events.

Nothing in the statute implies that an existing structure loses statutory rights if it is remodeled or fixed up. Indeed, such a policy is contrary to the express terms of PRC 30610(d). That section reads:

"*Notwithstanding any other provision of this division, no coastal development permit shall be required* pursuant to this chapter for the following types of development . . .

(d) Repair or maintenance activities that *do not result in an addition to or enlargement or expansion of, the object of those repair or maintenance activities*; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter." (emphasis added)

So the statute says **no** coastal development permit is necessary for remodeling if the size and footprint of a building is unchanged, subject to exceptions for extraordinary construction methods posing adverse environmental impacts.

The Commission's implementing regulation, 14 Cal. Admin. Code section 13252(a), identifies the extraordinary methods of repair involving a risk of substantial adverse environmental impact, as the statute contemplates.

The following subsection, 14 Cal. Admin. Code section 13252(b), however, says nothing about adverse environmental impacts. It rather states "Unless destroyed by natural disaster, the replacement of 50 percent or more of a single family residence . . . or any other structure is not repair and maintenance under Section 30610(d) but instead constitutes a replacement structure requiring a coastal development permit."

Well wait a minute. That's not what the law says. It says 100% rebuild is OK so long as the building size doesn't change. And even the Commission rule says that 100% is OK if the structure is destroyed by a natural disaster. The 50% rule, therefore, is just a Commission rewrite of the explicit direction of the legislature that no permit should be required for work that didn't change the size of an existing structure. Rather than trying to extend this unlawful rewrite of the statute, the Commission should abandon efforts to pile new, significant adverse consequences on remodeling permits.

"Retreat" strategies and B.2 Removal Plan Conditions should not be imposed on existing structures.

PRC 30235 requires protection of existing structures when necessary. It neither authorizes nor contemplates that the Commission may require removal of an existing permitted structure. The proposals to impose section B.2 removal conditions and A.6 waivers on permits, particularly on remodeling permits, are contrary to the basic structure of the Coastal Act.

On the merits, managed retreat strategies are seldom practical. In Stinson Beach, for example, existing development extends to bluffs and public land. There is no place to retreat to. Even if feasible in some locations, the economics, climate conditions and other facts of such strategies along the California coast are far different from the study in England cited in DRAP note 13. More importantly, the retreat strategies have been rejected by the Marin public when explained.

The Commission should abandon efforts to develop generally applicable rules that try to remove or relocate existing structures threatened by sea level rise. To the extent that sea level rise results in existing structures creating a public nuisance or hazard, existing law on those subjects, together with condemnation law, provide adequate solutions to address such problems.

The DRAP public trust concerns are overstated.

The DRAP discussion of the public trust doctrine at pp.18-22 incorrectly assumes that movement of the mean high tide line must inevitably push back shoreline development. To state the obvious, none of the cases cited considered the situation where global warming causes general sea level rise all along the coast. Assuming *arguendo* that courts make no exception or adjustment of the doctrine in light of new and radically different facts, the government agency with authority over public trust lands could choose to authorize preexisting uses to continue on public trust lands. The doctrine provides no useful guidance for policy making.

Whatever the future may hold for sea level rise, fears of potential requirements for new shoreline protective devices justify neither cumbersome new permits for fixing up existing homes nor a forced abandonment of statutory rights afforded existing structures.

Respectfully,

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COMMENTS ON RESIDENTIAL SEA LEVEL RISE GUIDANCE

Ed Spriggs Councilmember, City of Imperial Beach
Southern Area Representative to Leadership Committee
Coastal Cities Interest Group, League of California Cities

September 29, 2017

Dear Coastal Commission Staff:

Thank you for the opportunity to comment on the Draft Residential Sea Level Rise Guidance. This Guidance is very important for residents of Imperial Beach, over 80 percent of whom live in the coastal zone, for the municipality itself, given that it is surrounded on three sides by tidelands and has already experienced periodic nuisance flooding during king tides combined with storm surges and rainfall, and for coastal residents and businesses in Imperial Beach, all of whom currently are protected by seawalls or revetments that run the entire length of Imperial Beach's developed shoreline.

I am also grateful to serve as the League's southern area representative on its CCIG Leadership Committee, which covers coastal San Diego County. These coastal communities face conditions both similar to and different from those of Imperial Beach, and in addition include extensive bay and harbor development, bluff development and related protections and, like Imperial Beach, valuable wildlife habitats, public beaches and related visitor serving infrastructure and services. Every coastal community that I am familiar with very much wants to protect and preserve its attractive natural environment, including beaches, while also addressing the economic and recreational needs of the municipality, and its residents and visitors.

My comments are supplemental to those submitted by the City of Imperial Beach, and are fully compatible. My perspective is that of an elected who is deeply involved in the LCP amendment process, SLR issues and the issues and concerns of Imperial Beach residents, including those in hazard zones.

Among the strong points within the draft are its acknowledgment that the document represents "guidance" rather than regulation which, in addition to the several coastal typologies and case studies it contains, is a welcomed recognition of just how diverse California's developed coastal communities, and their environmental and geological settings, are. The inclusion of a section on community scale adaptation planning is a very useful and positive step away from the more parcel-oriented approach we seem to have fallen into, possibly as a result of years of Commission (rather than local) processing individual permit applications. Recognition of the importance of phasing adaptation strategies and use of trigger-based approaches should be helpful for communities with complex, diverse conditions and threats. Another very favorable aspect of the draft is its apparent recognition of the need for flexibility in allowing adaptation approaches that address unique community circumstances. The key implication of this stated flexibility for coastal communities facing the complex challenges of SLR is that we each may need to address coastal development as well as LCP amendments and updates in manners that may not always fall within the precise framework of the final residential guidance, more so if it is written, interpreted or applied in an ironclad manner.

Given this more permissive or flexible approach reflected in much (but not all) of the narrative, I would hope that Commission staff particularly would see the guidance, once finalized, not as an ironclad framework or checklist, but rather as a starting point. Such an approach would be consistent with the new partnership between Commission and cities suggested by Executive Director Jack Ainsworth during the afternoon he spent with the League's CCIG Leadership Committee back on August 14 of this year, a partnership that reflects a recognition that cities, too, want to preserve their beaches and other environmental assets for the benefit of their residents, businesses, visitors/tourists and, of course, city revenues.

Accordingly I will focus my specific comments on the sections of the draft that appear to me to be inconsistent with these core values: "guidance" not law; flexibility, and partnership that includes a reasonable deference to local municipal conditions, analyses, good intentions and professionalism). Specific comments:

1. Guidance, not law. The preamble to the guidance ("How to Use this Document") makes it clear that the guidance is advisory and not a regulatory document or legal standard of review for Commission or local government actions under the Coastal Act – that is, not an elaboration or interpretation of the Coastal Act. The highlighted "Note" at the end of the Introduction (p.2) is a more detailed statement as to the flexible use of the guidance. However, the wording of several provisions in the guidance seems to cloud this key principle:
    a. Reference to "formal adoption" by the Commission (p. 1, para 1) clearly seems to imply that the guidance will become Commission policy, as opposed to helpful, suggested guidance to Commission clients;
    b. Reference to LCP amendments needing to "reflect the recommendations in this document" (p.4) reinforces a mandatory or checklist use of the guidance in the context of LCP updates;

2. Overstating the Conflict Between Residential Development and Public Access. The second paragraph (p.1) clearly frames the challenge presented by coastal development in the context of the Coastal Act, but assumes there is an inherent conflict requiring "existing" development to eventually give way in order to preserve public access. Vertical access is provided by public infrastructure in many communities and horizontal access can be preserved, or in some cases reestablished, through natural adaptation measures, or through enhancements to public access elsewhere within the same community. In the case of Imperial Beach and other communities (and State-wide), only a portion of the total beachfront is developed.
3. Typologies. Inclusion of "Shore development typology groups" (p.5) seems intended to be helpful, but could tend to make everyone (including Commission staff) try to "fit" their project or LCP into these categories, which will not work in many cases. California's coastal variety and complexity (Imperial Beach fits two categories, plus one not included – Bayfront) make such typologies illustrative and non-all-inclusive, which should be more clearly stated.
4. Policy Options. Table 2 (p.6) needs a preamble noting that the list is not exhaustive and localities may choose others (e.g., groins in sec. F). See Imperial Beach staff comments.

5. Policy Options -- Beach Management Plan. Table 2 (p.7) item G.8 while well-meaning is a new "requirement" as well as being somewhat redundant with all of the other provisions in community scale planning having to do with the beach itself. Also, beach management plans would need to incorporate adjacent commercial or public recreational areas, not just residential areas of the beach. Also, establishing minimum beach widths should be optional or tailored to local variable conditions since everything can change with one storm event and one or more full seasonal cycles may be required before beach width is restored to prior condition. Recommend you add this plan requirement in the future only if needed.
6. Policy Recommendations -- Use Best Available Science. A good principle (p.7) that can become problematic when new SLR estimates come out after a recent vulnerability assessment using the best science at the time (say 2-5 years ago). Analyzing "the high projections" of SLR, which are now beyond 2 meters by 2100, could, if communities are forced (strongly encouraged) to use it, be inconsistent with the phased or trigger approaches to adaptation planning, causing undue harm to values and revenues decades before new planning and implementation may be required. A related point: there is not yet a State or national consensus on the SLR challenges that coastal California is addressing, and therefore no major allocation of State or federal funding or financing mechanisms that spread the financial burden of adaptation implementation beyond the coastal communities themselves, most of whom are small and unable to fund infrastructure, beach replenishment, or buy-outs on their own. Phasing will enable the political consensus to catch up to the scientific and on the ground realities, eventually. So, forcing a planning process NOW for the maximum SLR under the rubric of using the best available science is a trap the guidance – and its later interpretation by the Commission and its staff -- should clearly avoid. The draft guidance seems consistent with this point on p. 11, Analyzing Alternative Adaptation Strategies, 3rd paragraph.
7. Policy Recommendations – Regulate Redevelopment. The redevelopment concept (p.8) seems to be a relatively new hybrid to cover the area between new development and renovations, repairs, improvements, and not clearly covered in the Coastal Act, making this a potential quasi-regulatory expansion of Act requirements if we are not careful. Local jurisdictions should have the maximum flexibility to address this gap area, based on local conditions and a coherent LCP approach. Again, interim or phased solutions should be encouraged, such as elevation of properties on an individual scale, or improved seawall or revetment protection combined with beach replenishment or soft protections on a community scale, with the latter creating space for property improvements (including possibly "redevelopment") so long as full disclosure is provided and public access interests are protected.
8. Siting New Development. This section (pp. 11-12) refers to "all types of development" not just residential development. Applicability to residential should be clarified to avoid broadening this guidance beyond its intended purpose, and to recognize that other development (e.g., hotel or other quasi-public uses) may contain inherent justifications for exception. Please see Imperial Beach staff comment.
9. Developing Adaptation Strategies for Specific Areas. This discussion (pp 9-14) is generally very helpful, particularly when tempered by the statement that for purposes of implementing the Coastal Act, "no single category [protect, accommodate, retreat] or even strategy should be considered the 'best' option as a general rule." Regarding the

managed retreat portion (p.14), my comment as a locally elected official is that although this will be inevitable at certain points in the future that vary from area to area, even possibly *within* a community as small as Imperial Beach, municipalities and their citizens, as a general proposition, have a right to exist and to remain economically, socially and environmentally as viable as possible for as long as feasible. The statement that retreat is more cost effective than armoring over timescales greater than 25 years, may apply to less dense areas where the retreat options do not involve moving an entire low-lying municipality. Moreover, the cost of buyout, demolition, and restoration to sandy beachfront, of urbanized coastal areas needs much more study before this statement can be considered applicable to many coastal cities in California.

10. Legal Considerations -- Protection of "Existing" Structures. The Commission's interpretation of the Coastal Act, that essentially grandfathers in the legality of revetments and seawalls protecting structures built before January 1, 1977, while making the protection of more recent structures legally suspect, flies in the face of the fact that much of California's coastal development (perhaps most of it in terms of value) has occurred *since* that date. This is a matter of great concern to coastal cities. The Commission should let go of this forced interpretation and allow LCP's to address adaptation on a community-wide basis that can include consistent treatment of revetments and seawalls within a broader community-based strategy of "mitigating adverse impacts on local shoreline sand supply." This should eliminate current uncertainties and inconsistencies inherent in a property by property approach. See also Model Policy Language F-1. F-4 restrictions on improving and strengthening shoreline protective devices should not be precluded per se, particularly when the LCP contains a community wide mitigation arrangement.
11. Model Policy Language—A.7 Real Estate Disclosure of Hazards. This appears to be covered already by established real estate industry disclosure requirements. Matters already covered should not be added to LCP requirements.

Thank you for the opportunity to comment and best regards,
Ed Spriggs
Councilmember
City of Imperial Beach

City of Imperial Beach Staff Comments Regarding California Coastal Commission Residential Adaptation Policy Guidance

IB Staff would suggest that the following guiding principles be added to the Introduction of the Document:

1. Emphasize the document is not regulatory and that only when a municipality's LCP is silent on an issue, would guidance to assist in decision making be sought from these guidelines.
2. All protective devices should be permissible under the right circumstances. The absolute prohibition of any device or technique does not provide maximum flexibility for local coastal community needs. For example, Imperial Beach's LCP currently permits both hard and soft armoring and in order to address its local needs and community resiliency, both hard and soft armoring options need to be tools available.
3. Certainty and reliance for development activities necessary for the overall community health need to be assured, so the ability to rely upon an adopted LCP and the science upon which it was developed need to be static until consensus on new science is achieved or an update to the LCP is performed.

Table 2, page 6 –"List of model policy options": Add a preamble, suggested language: "The following policy options are not absolute and shall be determined at a Local Level and predicated upon locally adopted triggers"

Page 8 - Disclose Risks to Property Owners section: the last sentence should be reworded as following: Thus, LCP updates that account for the intent of Policies A.1-A.7 and G.1-G.2 may be considered.

Page 11-12 – Siting New Development section – the last sentence should be reworded as follows: "Providing for exceptions where there is a need to permit new development in a hazardous area to ensure community vitality and resiliency may be accommodated provided coastal access is maintained and enhanced.

Page 14 – Managed Retreat – The study cited that asserts retreat is more cost effective than maintaining armoring – to make this assertion for one of the basis of retreating seems cavalier in light of the complexities associated with individual community economics, land use, physical community development, geography, armoring techniques, etc. Staff would suggest this statement be eliminated as it does not account for the aforementioned complexities.

Page 27 – Legal framework flow chart: The term "economically viable" should be defined, should be defined by the local community and consider the community's overall economic health.

Page 29 – Adaptation Pathways – great concept as it establishes an approach that is locally based and inclusive of "event triggers". This trigger approach as depicted by Figure 3 on page 31 – is based upon events, which are local, and as such provide an incremental and pragmatic method to address SLR that will most likely have greater community support. This is one reason why all shoreline protection devices and techniques need to be permissible for each community because of its individual and unique complexities may determine through its LCP which approach is best.

Page 43 – B. Avoid siting new development… - This entire section should incorporate a preamble that recognizes the individual community's economic health and adaptation pathways.

Page 46 – B.* Nonconforming Structures: This section is problematic as it seems to leave only retreat as an option to address SLR. There should be an acknowledgement that these structures may remain in the context of an overall adaptation strategy that is trigger based. If the "event triggers" are not happening, then redevelopment and development and non-conforming structures should remain.

Page 47 – Exceptions – the definition of reasonable economic use should be defined by the community and take into account its overall community's economic health.

Page 48 – managed retreat D.1 – this section is problematic. It would severely limit any development opportunities by requiring a deed restriction for removal. Again, managed retreat seems to be the only option and does not offer an alternative approach.

Page 49: see previous comments regarding managed retreat.

Pages 50-53: F. Building Barriers to Protect From Hazards: Shoreline armoring and protective devices should be permissible as determined through the LCP and not precluded outright. It is one tool that may serve to protect a larger system and a community's economic health and public access.

Pages 53-58 – Community Scale Adaptation Planning: Agreed with note that a parcel level action is too limited and that a community wide approach is necessary, which is precisely why a local approach that can use all tools, if appropriate, should be permissible and established at the local level.

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Coastal Property Rights, Land Use & Litigation

September 29, 2017

California Coastal Commission
Sea Level Rise Working Group
45 Fremont Street, Suite 2000
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Via Email: ResidentialAdaptation@coastal.ca.gov

September 29, 2017

RE: Comments on Draft Sea Level Rise Residential Adaptation Policy Guidance

Dear Committee Members:

I represent numerous blufftop homeowners in Solana Beach, California. On behalf of my clients, I am submitting the following comments in response to the July 28, 2017 draft of the California Coastal Commission's Residential Adaptation Policy Guidance ("RAPG"). Thank you for providing me with the opportunity to comment.

Solana Beach's coastal bluffs are almost completely developed and populated with a mix of condominiums and single-family homes. The majority of the blufftop homes in Solana Beach were constructed within the past 40 years, with many being completed after the 1976 adoption of the California Coastal Act. Thus, the majority of blufftop homeowners in Solana Beach will be directly impacted by the CCC's adoption of new policies, including those that are outlined in the proposed RAPG.

The preservation of public access and protection of natural resources are only some of the policies promulgated by the Coastal Act. The Coastal Act also promotes the protection of private property. The proposed RAPG will severely restrict private property rights by eliminating property owner's rights to protect their property and existing homes from erosion. For example, one of the adaptation strategies referenced throughout the RAPG is based on a notion that existing structures should be relocated to a different, more inland, location to avoid impacts of sea-level rise and preserve public access to the coast.

As the Commission is well aware, there is a tremendous cost differential between blufftop, ocean front property, and inland property throughout California. Moreover, in small coastal cities like Solana Beach, there is little room for new development in any portion of the city, including inland areas. Relocating blufftop property owners to a more inland location (and/or acquiring coastal property from private citizens) to preserve public access to the coast will be both cost prohibitive and logistically impossible for local governments. Moreover, this policy is antithetical to private property rights as it is inconsistent with the California Constitution, which provides, in relevant portion: "All people are by nature free and independent and have inalienable rights. Among these are enjoying and defending life and liberty, acquiring, possessing, and protecting property, and pursuing and obtaining safety, happiness, and privacy." (Cal. Const., art. 1, § 1.)

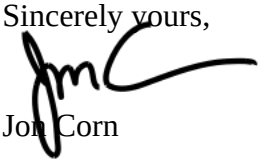
My clients are also concerned that the proposed RAPG includes a near complete prohibition of the construction of any new shoreline armoring devices that may be necessary to protect existing structures from danger in the future, in violation of Public Resources code section 30235. The proposed RAPG also forecloses upon a property owner's right to perform substantial renovations to an existing structure that currently depends upon existing shoreline armoring for protection. Many blufftop homeowners have owned their property for years, if not decades. For most, their home is their family's most valuable financial asset. Some homeowners have invested a large portion of their financial resources in improving and protecting their property, and many have obtained permits for and installed shoreline armoring devices (i.e., sea walls) to guard against erosion. A bar on the construction of significant improvements to properties that are currently protected by sea walls would severely restrict the owner's rights to enjoy their property and will negatively impact property values for all homeowners.

Finally, the proposed RAPG mandates the imposition of onerous deed restrictions and conditions for development of blufftop property, including the waiver of all rights to future shoreline protection, and an agreement to remove or relocate structures that may require future protection. Such requirements fail to acknowledge that California law requires that any condition the government imposes upon private property owners "must be based upon a 'rough proportionality' between the development impact and the dedication, and a public agency 'must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.'" (*Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854, 891.) Here, it appears the CCC is only concerned with preservation of public access to the coast, while completely ignoring the rights of private property owners. Neither a proposed waiver of future shoreline protection, nor an agreement to remove or relocate structures at some point in the future, have any relationship to the actual impacts caused by coastal development. Further, the Coastal Act does not require private property owners to waive their right to protect their homes, nor does it require removal of structures in exchange for the right to develop privately owned coastal property.

It is unrealistic to assume that California's coastline will return to 1850s conditions. Intense and pervasive development of upland watershed areas has negatively impacted the state's coastal areas, contributing to widespread sand depletion and premature erosion of coastal bluffs. The state should not unfairly burden a small group of private citizens with the obligation to finance and maintain public access to coastal resources. A state-wide, government sponsored, coastal sand replenishment and retention program would be a far superior solution to protect and enhance the state's coastline.

In conclusion, the draft RAPG promulgates unreasonable policies and unduly harsh requirements that severely restrict the Constitutional rights of private citizens to use and enjoy their coastal property, and will be financially and logistically impossible for local governments to implement. Thank you for your consideration.

Sincerely yours,



Jon Corn

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Presentation on Draft Residential Adaptation Policy Guidance – Discussion Item Only

Exhibit 1: Draft Residential Adaptation Policy Guidance

CALIFORNIA COASTAL COMMISSION RESIDENTIAL ADAPTATION POLICY GUIDANCE

Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs

JULY 2017

DRAFT

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DRAFT RESIDENTIAL ADAPTATION POLICY GUIDANCE

July 2017

This report was prepared with financial assistance from National Oceanic and Atmospheric Administration(NOAA) FY 2014 grant NA14NOS4190046

How to Use this Document

Use this document as:	This document is NOT:
Interpretive Guidelines	**Regulations**
This Guidance is advisory and not a regulatory document or legal standard of review for the actions that the Commission or local governments may take under the Coastal Act. Such actions are subject to the applicable requirements of the Coastal Act, the federal Coastal Zone Management Act, certified Local Coastal Programs, and other applicable laws and regulations as applied in the context of the evidence in the record for that action.	
Examples to modify	**A substitute for consultation with CCC staff**
This Guidance contains model policies that may need to be customized before they can be incorporated into individual LCPs. In addition, not all policies are applicable in every jurisdiction. Commission staff can assist local governments with using the guidance to develop policies that help prepare for sea level rise impacts in their communities.	
A menu of options	**A checklist**
Not all of the content will be applicable to all jurisdictions, and readers should view the content as a menu of options to use only if relevant, rather than a checklist of requirements.	

Comment [CDA1]: In the interest of public involvement and productive interagency collaboration and coordination, please post all letters and comments received on these guideline in a readily accessible fashion on the Commission's website at the earliest possible time.

Comment [CDA2]: Please confirm that even if this Draft Policy Guidance is adopted as an "Interpretive Guideline" it will remain a set of suggestions for Local Governments to consider and will not have the force of regulations or legal standards.

Comment [CDA3]: Despite this statement, it appears that in practice Commission staff may be proposing these guidelines as standards that LCPs will be required to meet to gain certification.

Certain policies are stated as mandatory, even when the guidance is not explicitly required, and arguably exceeds the mandate of the Coastal Act. For example the statement on Page 21 that policies specific to residential adaptation must ensure that residences and any ancillary development, including shoreline armoring, are not located on.trust lands and will not harm public trust resources by interfering with future migration of such trust lands.

Introduction

This Guidance, which will be presented to the Coastal Commission for consideration and formal adoption as interpretive guidelines,[1] is intended to assist local governments in planning for sea level rise adaptation. The Guidance follows up on, and is meant as a companion document to, the Commission's 2015 Sea Level Rise Policy Guidance, which set forth broad principles related to planning for sea level rise. This Guidance provides a more in-depth discussion of sea level rise adaptation policies specifically related to residential development, and it provides examples of policies that cities and counties can consider for use in their communities. Not all model policies will apply in each community, and local governments may want to consider modifications to the language provided, depending on the specific community and geologic contexts of the area. Commission staff is available to assist with understanding and applying the guidance in specific communities.

Residential development is the foundation of many of California's coastal communities. However, as sea levels rise, and beaches migrate inland, maintaining residential development adjacent to the shoreline will cause the narrowing and eventual loss of beaches, dunes and other shoreline and offshore recreational areas. This new threat to public access has the potential to cause significant conflicts with the Coastal Act, which was enacted for the purpose of protecting California's coastal resources. It also conflicts with the public trust doctrine, as embodied in other statutes, Art. 10, Section 4 of the California Constitution, and the common law. Furthermore, it presents a significant environmental justice issue, if residents continue to enjoy shoreline access, while the general public is blocked from accessing the shore.

Given the severity of impacts that could occur as a result of sea level rise, and the uncertainties surrounding projections of sea level rise over the lifetimes of many coastal projects, communities, planners, coastal managers and project applicants will need to use adaptation strategies to effectively address coastal hazard risks and protect coastal resources over time. In Section 1, the Guidance explains how Local Coastal Program (LCP) planning for sea level rise can provide for resilient shoreline residential development while protecting coastal resources. Section 1 also presents background on LCP planning, residential development, and the challenges that sea level rise presents for different types of hazards and development.

Section 2 identifies LCP policies that apply to all adaptation planning efforts, while Section 3 details considerations for developing adaptation strategies in specific areas and contexts. As described in Section 4, these adaptation strategies will need to be evaluated, identified and implemented within a relevant set of laws, including the Coastal Act, public trust doctrine, and takings law. Section 5 on Implementation presents a summation of how LCP Planning Steps interact with specific adaptation policies (identified in Section 7). The Implementation Section also presents ways of phasing in adaptation strategies over time as sea levels rise. Next, Section 6 presents case studies showing how sea level rise vulnerabilities have recently been addressed in different types of community contexts.

Finally, Section 7 presents sample policies for cities and counties to consider for use in different community and geologic contexts. There are a number of options for how to address the risks and impacts associated with sea level rise in the shorter term, through evaluation of coastal

[1] Pursuant to Public Resources Code Section 30620.

Comment [CDA4]: Please clarify how this "formal adoption" **as set out in Section 30620** will be made consistent with the statement under "How to use this Document" above that "*This Guidance is advisory and not a regulatory document or legal standard of review for the actions that the Commission or local governments may take under the Coastal Act…"*

Section 30620 Interim procedures;
(a) By January 30, 1977, the commission shall, consistent with this chapter, prepare interim procedures for the submission, review, and appeal of coastal development permit applications and of claims of exemption. These procedures shall include, but are not limited to, all of the following:

(3) Interpretive guidelines …
(b) …. The commission may thereafter, from time to time, and, except in cases of emergency, after public hearing, modify or adopt additional procedures or guidelines that the commission determines to be necessary to better carry out the purposes of this division.

Comment [CDA5]: Please include a specific statement adopted by the State Lands Commission regarding interpretation of the Public Trust Doctrine as it relates to sea level rise and the migration of the Public Trust.

development permit applications, and in the longer term through development of management plans and LCP updates. In most cases, the strategies for addressing sea level rise hazards will require proactive planning to ensure protection of coastal resources and development. Such proactive adaptation strategies generally fall into the following categories, though some strategies combine elements of more than one:

1) Avoid Siting Development in Hazard Areas;
2) Design for the Hazard (accommodation);
3) Move Development Away from Hazards (managed realignment/retreat);
4) Move Hazards Away from Development (soft or natural protection)
5) Build Barriers to Protect from Hazards (hard protection)

The LCP model policy language is organized according to these general adaptation approaches which may also be incorporated into conditions of approval of development by the Commission and local government through the coastal development permit process. Additionally, a section on community scale planning presents multiple adaptation approaches within individual policies.

Local governments structure their LCPs (through their Land Use Plans and Implementation Plans) in a variety of ways, with some local governments including significant policy detail in the LUP, and some reserving such detail for the IP. Some of the model policies in this policy guidance reflect a more general policy (as most commonly seen in an LUP) and some have more relevance to implementation or zoning policy (more typically seen in an IP). Local governments should customize the model policies to align with their communities' approach and to facilitate timely development of adaptation strategies.

Note: The model policies presented herein are intended to provide guidance for the development of LCP policies, with an emphasis on applicability to residential development. **Not all approaches listed here will be appropriate for every jurisdiction, nor is this an exhaustive list of options**. In addition, looking at a single policy does not indicate how the entire LCP achieves compliance with the Coastal Act. Similarly, in this policy guidance, the model policies work together. For example, policies on setbacks only work if you also have a policy requiring the site-specific hazard report that is needed to calculate the setback. Therefore, users of the model policies should consult all sections of this Guidance for assistance in understanding how the policies work together.

Comment [CDA6]: The discussion in this section is inadequate, failing to mention one of the most obvious and proven accommodation adaptation-elevating structures. Please acknowledge this approach to accommodation, hazard, which is in fact a solution that has long been national policy through the National Flood Insurance Program of the Federal Emergency Management Agency (FEMA).

Comment [CDA7]: Historically, Commission staff has required increasing amounts of detail in the LUP. Please include a clear acknowledgement that reserving detail for the IP as indicated here is a fully acceptable practice, at the discretion of the local government.

Comment [CDA8]: It is encouraging to read in this Draft Policy Guidance support for flexibility and locally-adapted approaches to policies, rather than statewide across the board mandates that have sometimes characterized previous suggested modifications to LCP amendment proposals.

Comment [CDA9]: Please clarify if the model policies will be part of the proposed interpretive guideline.

1. Background

The potential impacts of sea level rise in California fall directly within the state and local government's planning and regulatory responsibilities under the Coastal Act. Sea level rise has a number of effects, including increasing the risk of flooding, coastal erosion, and saltwater intrusion into freshwater supplies, which have the potential to threaten many of the resources[2] that are integral to the California coast, including coastal development, coastal access and recreation, habitats (e.g., wetlands, coastal bluffs, dunes, and beaches), coastal agricultural lands, water quality and supply, cultural resources, community character, and scenic quality. In addition, many possible responses to sea level rise, such as construction of barriers or armoring, can have adverse impacts on coastal resources. For example, beaches, wetlands, and other habitat backed by fixed or permanent development will not be able to migrate inland as sea level rises, and will become permanently inundated over time, which in turn also presents serious concerns for future public access and habitat protection.

Comment [CDA10]: It would be helpful to provide research that presents data and analysis of how beaches and wetlands will actually respond to sea level rise (SLR), including the degree they are submerged at different stages of SLR, the process of and time frame for reaching a new dynamic equilibrium (if at all) between rising ocean levels and the dry beach, and the relative size of resulting beaches and wetlands. This should be provided for representative typologies of the California Coast.

The Coastal Act mandates the protection of public access and recreation along the coast, and of coastal habitats and other sensitive resources, as well as the provision of priority visitor-serving and coastal-dependent or coastal-related development. At the same time, it requires minimizing risks to life and property from coastal hazards. The Coastal Commission's Sea Level Rise Policy Guidance, adopted in August 2015, can help planners, decision makers, project applicants, and other interested parties continue to achieve these goals in the face of sea level rise by addressing its effects in Local Coastal Programs and Coastal Development Permits. The intent of this document is to build on the 2015 Sea Level Rise Policy Guidance to provide more specific details on how a community can address sea level rise in LCPs, which are essential planning tools for fully implementing sea level rise adaptation efforts.[3]

Importance of LCPs

LCPs contain the standards for future development and protection of resources in the coastal zone. Each LCP includes a Land Use Plan (LUP) and an Implementation Plan (IP). The LUP specifies the kinds, locations, and intensity of uses, and contains a required public access component to ensure that maximum recreational opportunities and public access to the coast is provided. The IP includes measures to implement the LUP, such as zoning ordinances. LCPs are prepared by local governments and submitted to the Coastal Commission for review and certification for consistency with Coastal Act requirements.[4]

[2] The term "coastal resources" is meant to be a general term for those resources addressed in Chapter 3 of the California Coastal Act including but not limited to beaches, wetlands, agricultural lands, and other coastal habitats; coastal development; public access and recreation opportunities; cultural, archaeological, and paleontological resources; and scenic and visual qualities.

[3] The California Climate Adaptation Strategy (CNRA 2009) and Safeguarding California (CNRA 2014) specifically identify LCPs as a mechanism for adaptation planning along the California coast.

[4] In addition, there are other areas of the coast where other plans may be certified by the Commission, including Port Master Plans for ports governed by Chapter 8 of the Coastal Act, Long Range Development Plans for state universities or colleges, and Public Works Plans for public infrastructure and facilities. Following certification of these types of plans by the Commission, some permitting may be delegated pursuant to the Coastal Act provisions governing the specific type of plan.

To be consistent with the Coastal Act hazard avoidance and resource protection policies, it is critical that local governments with coastal resources at risk from sea level rise certify or update Local Coastal Programs to provide a means to prepare for and mitigate these impacts. The overall LCP update and certification process has not changed; however, the impacts of accelerated sea level rise should now be addressed in the LCP chapters pertaining to hazard and coastal resource analyses, alternatives analyses, community outreach, public involvement, and regional coordination. This Guidance is designed to facilitate the existing LCP certification and update steps by providing model language and recommendations to local governments for resilient residential shoreline development. Although the existing LCP certification and update processes are still the same, sea level rise calls for new regional planning approaches, new strategies, and enhanced community participation.

While the document is intended to guide LCP planning and development decisions to ensure effective coastal management actions, it is advisory and does not alter or supersede existing legal requirements, such as the policies of the Coastal Act and certified LCPs. Since many existing LCPs were certified in the 1980s and 1990s, it is important that future amendments of the LCPs consider sea level rise and adaptation planning at the project and community level, as appropriate. One of the Commission's top priorities is to coordinate with local governments to complete and update LCPs in a manner that adequately addresses sea level rise and reflects the recommendations in this document.

Comment [CDA11]: We very much agree. Due to what appears to be staffing shortages within the CCC, the public engagement process at the Commission level can be constrained prior to Commission hearings on proposed amendments and modifications thereto.

For matters of such import as a major LCP re-write amendment, the Commission could conduct a working session with their staff and local government, rather than 15 -20 minutes allotted for testimony. The formal hearing would come at a subsequent session. Whether this approach is feasible or not, the Commission should advocate for increasing their staff to enable them to spend more time working with local governments to resolve issues and to develop and release proposed modifications to LCP amendments for public review and comment much earlier than what tends to the current practice of issuing extensive addenda merely days before a hearing.

Comment [CDA12]: Please strike "and reflects the recommendations in this document"- it is confusing and inconsistent with prior statements (including the highlighted one above) that the document is advisory.

Residential Development

This policy guidance focuses on residential development because it is one of the most prevalent community development patterns along California's coast, and thus poses one of the more frequent hazards management challenges. Much of this challenge results from the overall pattern of residential development along California's coast that, for the most part, was established before the Coastal Act. Within many of these residential areas there is typically a mixture of structures built before and after the Coastal Act. In addition, many of California's urban coastal areas were built out during the post-WWII development boom that also coincided with a relatively "calmer" coastal period that had fewer, less intense storms. Thus, when the Coastal Act was passed in 1976, the State inherited many fixed development patterns in inherently hazardous coastal locations, perhaps due to an artificially low appreciation of the inherent risks in these locations at the time they were developed. The El Niños of 1977-78 and 1982-83 marked the end of the "calm" period and caused enormous amounts of property damage, shoreline erosion, and also often led to necessary emergency shoreline armoring.

Policymakers seeking effective responses to sea level rise in California must confront the inherent complexity of the challenge: California has more than 1271 miles of main coastline, with a diversity of physical environments, ranging from high cliffs to low river mouths; rocky substrates to sandy dunes; high wave energy exposed beaches to lower energy estuarine and bay environments.[5] And there are a wide variety of developed areas along this diverse coastline; for

[5] *See generally*, LIVING WITH THE CHANGING CALIFORNIA COAST (Gary Griggs et al. eds., 2005).

example, the U.S. Census Bureau identifies 117 distinct developed "places" on California's outer coast.[6]

Categorizing California's residentially-developed areas in a typology can help organize approaches for sea level rise adaptation. Typologies are systematic classifications of groups that have characteristics in common. Many fields use typologies to facilitate ordering of information for communication and outreach, from linguistics to natural resource management to climate adaptation.[7] In the case of hazards management, using a typology to describe residential development on the California coastline affirms the diversity of development contexts in California, and thus the complexity of the planning challenge, but it may also help frame the variety of key planning issues important for addressing sea level rise in particular places. Table 1 describes a conceptual grouping of shoreline residential development types.

Table 1. Shore development typology groups with associated subtypes

Shore Development Type		Subtype		
1	Urban blufftop	a) Low	b) High	
2	Urban beachfront	a) Beach	b) Dune	
3	Low density blufftop	a) Low	b) High	
4	Low density beachfront	a) Beach	b) Dune	
5	Urban estuary	a) Bay	b) River	c) Marsh
6	Low density estuary	a) Bay	b) River	c) Marsh

Considering the shoreline, backshore landscape and residential intensity patterns, this conceptual typology can describe the most common settings that bound the diverse development patterns along the California shoreline. Subtypes represent the geomorphic landscape for developed neighborhoods that are located on the beachfront, blufftop, or in other low-lying environments. The estuary type broadly covers low-lying shorelines characterized by some mixing of freshwater and saltwater, as seen at river mouths, lagoons, bays, and saltmarsh. The shore development type in combination with subtype gives a more useful level of detail to planners who are identifying the policies and ordinances to apply to development in their communities.

Although these residential types and subtypes should be addressed within their unique context, they often share a common challenge, in that protecting residential development that is located adjacent to the shoreline will result in narrowing and eventually eliminating the beach, or other coastal resource (e.g., wetlands, dunes) and loss of and/or damage to offshore recreation areas (e.g., for surfing). In order to protect beaches and other coastal resources for future generations, as required by the Coastal Act, this inherent conflict must be successfully addressed through sea level rise adaptation planning.

Comment [CDA13]: The California coast is much more diverse than the 6 categories listed here, and the actual "variety of key planning issues important for addressing sea level rise in particular places" will be far more varied. The Legislature required Local Coastal Plans in specific recognition that these plans must take into account the specific conditions and circumstances of each part of our extremely varied coast, and craft plans that particularly and specifically take these variations into account. Policy guidance can be helpful in facilitating consideration of options for addressing sea level rise issues; however LCP amendments should ultimately be developed to fit the conditions on the ground with room for adaptive management going forward.

Comment [CDA14]: There a other typological considerations that could be more important- whether there is a public walkway, parking or access facility between the homes and the beach, whether they are on septic tanks or sewer, the kinds and extent of adaptations already existing.

Comment [CDA15]: To what degree will beaches and wetlands be reduced or eliminated simply by inundation or mobilization by higher ocean water levels irrespective of the presence or absence of adjacent development?

[6] U.S. Census Bureau, (2010). *Cartographic Boundary Shapefiles - Places (Incorporated Places and Census Designated Places)* [Data file] Retrieved from ftp://ftp2.census.gov/geo/pvs/tiger2010st/06_California/06/tl_2010_06_place10.zip (accessed October 1, 2015).

[7] Y. T. Maru, J. Langridge & B. B. Lin, *Current and Potential Applications of Typologies in Vulnerability Assessments and Adaptation Science* (CSIRO Climate Adaptation Flagship, Working Paper No. 7, 2011), https://research.csiro.au/climate/wp-content/uploads/sites/54/2016/03/7_Typologies-Adaptation_CAF_pdf-Standard.pdf.

Planning for sea level rise in an LCP context will require multiple policies and phased approaches. A list of model policies a community might consider for different shoreline types follows in Table 2.

Table 2. List of model policy options (see Section 7 for full model policy language)

UNDERSTANDING SEA LEVEL RISE HAZARDS
A.1 Identifying and Using Best Available Science
A.2 Identifying Planning Horizons
A.3 Mapping Coastal Hazards
A.4 Site-specific Coastal Hazards Report Required
A.5 Coastal Hazards Report Contents
A.6 Assumption of Risk, Waiver of Liability and Indemnity
A.7 Real Estate Disclosure of Hazards
AVOID SITING NEW DEVELOPMENT OR PERPETUATING REDEVELOPMENT IN HAZARD AREAS
B.1 Siting to Protect Coastal Resources and Minimize Hazards
B.2 Removal Plan Conditions for New Development in Hazardous Areas
B.3 Reliance on Shoreline Armoring
B.4 Bluff Face Development
B.5 Determining Bluff Setback Line
B.6 Minor Development in Hazardous Areas
B.7 Definition of Redevelopment
B.8 Nonconforming Structures
B.9 Restrict Land Division in Hazardous Areas
B.10 Takings Analysis
DESIGN FOR THE HAZARD
C.1 Adaptive Design
MOVING DEVELOPMENT AWAY FROM HAZARDS
D.1 Removal Conditions/Development Duration
D.2 Contingency Funds
D.3 Limited Authorization Period and Planned Retreat Management Plan
MOVING HAZARDS AWAY FROM DEVELOPMENT
E.1 Habitat Buffers-New Concepts
E.2 Non-structural Shoreline Armoring
E.3 Avoid Adverse Impacts from Stormwater and Dry Weather Discharges
E.4 Flood Hazard Mitigation
BUILDING BARRIERS TO PROTECT FROM HAZARDS
F.1 Shoreline Protective Devices
F.2 Prioritization of Types of Shoreline Protection
F.3 Siting and Design to Avoid and to Mitigate Impacts
F.4 Repair and Maintenance of Shoreline Armoring
F.5 Evaluation of Existing Shoreline Armoring
F.6 Shoreline Armoring Duration

Comment [CDA16]: What will be regarded as Best Available Science? The USGS (CoSMoS) and the FEMA NFIP Maps are widely considered to be appropriate current sources of information to rely upon in developing and applying LCP policies; however, it would be helpful to explain what happens if competing studies or data are presented from outside the local agency. To ensure consistency and predictability, best available science should be determined by policies and standards adopted and certified in LCPs.

Comment [CDA17]: While specific hazards reports may be warranted, they may be unnecessarily duplicative or inconsistent with more comprehensive best available science. The LCP should be able to specify when project-specific studies should and should not be relied upon and how they should be used.

Comment [CDA18]: The term "redevelopment" is not defined in the Coastal Act. The Draft Policy Guidance should clarify whether this definition is an optional standard that local jurisdictions may or may not choose to adopt, or alternatively if its inclusion is intended to establish a new requirement to be imposed through the LCP update process. The importance of clarify regarding intent here cannot be understated. Proposing the definition as a future mandate would conflict with the ACT and exceed the CCC's authority.

Comment [CDA19]: Elevating structures to move them above the hazard zone deserves its own distinct category here, especially since it is a national objective through FEMA's National Flood Insurance Program (NFIP) to protect lives and reduce risks of damage.

F.7 Shoreline Armoring Mitigation Period
F.8 Shoreline Armoring Monitoring
F.9 No Future Shoreline Armoring
F.10 Bulkheads for Waterfront Development
COMMUNITY SCALE ADAPTATION PLANNING
G.1 Management of Sea Level Rise Hazards
G.2 Adaptation Plan
G.3 Sea Level Rise Hazard Overlay Zone
G.4 Beach Open Space Zone
G.5 Beach Replenishment
G.6 Improve Drainage on Bluffs to Reduce Erosion
G.7 Repetitive Loss
G.8 Beach Management Plan
G.9 Managed Retreat Program
G.10 Transfer of Development Rights Program
G.11 Geologic Hazard Abatement Districts (GHADs) and County Service Areas (CSAs)

Comment [CDA20]: This appears to be a new obligation that would be placed on local governments. No mandate for it appears in the Coastal Act. The Draft Policy Guidance should clarify that these proposed plans and other Community Scale Adaptation Planning elements are entirely voluntary on the part of local governments and will not be mandated through suggested modifications.

2. Policy recommendations for all hazardous areas

Broadly, communities planning for sea level rise will need to embark on a process to learn about 1) the increasing hazards that threaten their communities and its coastal resources, 2) what options exist for protecting their threatened built and natural assets, and 3) what adaptation pathway choices are suitable given social, economic, legal, resource, and environmental justice concerns. This planning process includes identifying how and where to apply different adaptation mechanisms based on Coastal Act requirements, other relevant laws and policies, acceptable levels of risk, and community priorities. The list of model policies above (Table 2) and the discussion below is not exhaustive, but provides an introduction to a variety of options that are potentially applicable in most communities. By planning ahead, communities can reduce the risk of costly damage from coastal hazards, can ensure the coastal economy continues to thrive, and can protect coastal habitats, public access and recreation, and other coastal resources for current and future generations. While adaptation strategies should be chosen based on the specific risks and vulnerabilities of a particular region or project site, in the context of applicable Coastal Act and LCP requirements, the following broad policies exemplify important concepts for a strong LCP framework addressing sea level rise.

Use Best Available Science

Despite the variety of coastal community types and planning contexts, it is important that all local governments undertake vulnerability assessments and begin the adaptation planning process to allow for continued improvement of their communities in a way that also protects coastal resources and public access to the maximum extent feasible as the sea level rises. As a general matter, all communities should embrace the best available science and analyze high projections of sea level rise in their planning for coastal hazards. If detailed local vulnerability assessments have not been completed, the planning and project design process can rely on increasingly available mapping tools.[8] Policies A.1 – A.5 demonstrate model options for integrating best available

Comment [CDA21]: Please clarify that analyzing high projections does not necessarily mean relying upon them as dictates for building regulations in the short to medium time frame projections.

[8] For a list of available mapping tools, see CCC Sea Level Rise Policy Guidance, Appendix C.

science on sea level rise into LCP planning through use of sea level rise scenarios, mapping, and technical reports.

Ongoing monitoring of conditions on the ground will also be important for implementing adaptation strategies at the appropriate time; thus, communities should consider developing monitoring programs. Monitoring can occur on a site-specific basis (e.g., Policy F.8 – Shoreline Armoring Monitoring) or on a community scale, through adaptation programs that rely on specific thresholds to trigger implementation of adaptation phases (e.g., Policy G.8 – Beach Management Plan).

Comment [CDA22]: The CCC should propose legislation to provide local agencies funds for ongoing monitoring as such data will be critical to the continuing assessment, mitigation and adaptation of sea level rise risks.

Disclose Risks to Property Owners

All communities should also be considering longer planning horizons and phased approaches that inform property owners and the public about planned adaptation through such mechanisms as hazard overlay zones, deed restrictions, real estate disclosures, and assurances or waivers of rights based on defined triggers sensitive to the specific planning context. Thus, LCP updates that account for the intent of Policies A.1 – A.7 and G.1 – G.2 are necessary for every community addressing sea level rise.

Comment [CDA23]: Consistent with the overriding direction that "*This Guidance is advisory and not a regulatory document or legal standard of review…"* the phrase "are necessary" should be deleted and rephrased to read "Local governments pursuing LCP updates addressing sea level rise should consider the intent of Policies A.1 - A.7 and Policies G.1 – G.2."

Avoid Hazards through Siting and Design

Development should be required to be resilient and safe, while assuring the protection of shoreline recreational resources and ecological values. Avoiding flooding and erosion through setbacks, siting, and design decisions that locate development at safe distances from potential hazards should be the first consideration for all types of new development. Restricting land division in hazard zones can also help avoid increasing hazard risks to coastal development.

The long-term effectiveness of this strategy depends on the level of vulnerability a property experiences and whether existing development patterns (densities, lot sizes, etc.) easily allow siting to avoid hazards. These strategies are low cost compared to armoring solutions or other adaptation strategies. Policies B.1 – B.3, E.1 and E.4 could be considered to promote the safe location of new development.

Comment [CDA24]: This section, and particularly the statement to "limit a property owner's ability to rebuild or renovate," appears contradictory when juxtaposed against the guideline objective to "ensure that redevelopment is resilient to future hazards." The Guidance should provide an expanded explanation of how the CCC encourages resiliency through design in communities where little to no opportunity exists for relocation\while at the same time discourages the modifications that would create the resiliency.

Regulate Redevelopment

Communities updating their LCPs to address sea level rise have a strong rationale for requiring new development to meet standards that can be safe under expected future conditions. However, because many communities have existing development in hazardous areas already, it will be challenging to ensure that redevelopment is also resilient to future hazards, especially because redevelopment occurs incrementally. Thus, rebuilding and redevelopment definitions should be used to provide a foundation for implementing additional adaptation strategies.

Comment [CDA25]: The definition of "Redevelopment" in the model policies appears nowhere in the Coastal Act nor its Administrative Regulations. The arbitrary division of a structure into component parts and then applying the 50% trigger to each and any of those parts is inconsistent with the rules currently applied by most local governments (and FEMA's own triggers for achieving hazard safety).In the case of Marin County, it also conflicts with the Commission-approved Categorical Exclusion. How many other Local Governments are similarly affected? In particular, this proposal creates a serious disincentive to at-risk people raising their homes consistent with FEMA policies for flood and storm safety. The Commission should be clear as to whether this definition and other related policies are intended to advance an overarching goal of managed retreat in low lying coastal communities and if this goal will be implemented through conditions of CDP approval.

Rebuilding and redevelopment restriction strategies could be used to limit a property owner's ability to rebuild or renovate a structure located in a sea level rise hazard zone. If the site allows, a structure could be set back from the coastal hazard as it redevelops. Other more design-based approaches that attempt to maintain development in such areas may also be appropriate in certain circumstances (e.g., elevation). Redevelopment policies should be coupled with real estate disclosures (Policy A.7) to inform buyers of the sea level rise hazards and future development restrictions.

Comment [CDA26]: Design-based approaches (including elevation) should be at least as readily available to local government for LCP approval as "Rebuilding and redevelopment restriction" strategies. Please reword this sentence to read: "…Other more design-based approaches that attempt to maintain development in such areas (e.g., elevation) may also be appropriate in LCPs…."

These strategies are low cost compared to armoring solutions, and they allow property owners to

continue use of their property until rebuilding restrictions phase out high-risk and high-impact development over time.[9] Policies B.7 – B.8 offer examples of redevelopment and nonconforming structure policies.

Comment [CDA27]: This seems to presume that rebuilding restrictions are the only means by which development would be "phased out". What about other non-regulatory factors (insurance costs, personal choice, convenience, etc). In addition, many areas of the world have learned to "live with water," and this strategy will be considered on both the coast and Bayside in Marin, so that some potentially exposed properties might be able to continue without becoming high-risk or high-impact.

3. Developing adaptation strategies for specific areas

After evaluating vulnerability and establishing policies to be used throughout hazardous areas, communities can begin the process of evaluating and choosing adaptation strategies for specific areas. In most cases, especially for LCP land use and implementation plans, multiple adaptation strategies will be needed and every community will need to assess their risks and their potential options. There are a number of options for how to address the risks and impacts associated with sea level rise. Choosing to "do nothing" or following a policy of "non-intervention" will likely lead to unacceptable exposure to hazards and impacts to coastal resources, so the strategies for addressing sea level rise hazards will require proactive planning to ensure protection of coastal resources and development. Such proactive adaptation strategies generally fall into three main categories: protect, accommodate, and retreat.

Protect: Protection strategies refer to those strategies that employ some sort of engineered structure or other measure to defend development (or other resources) in its current location, oftentimes without changes to the development itself. Protection strategies can be further divided into "hard" and "soft" defensive measures or armoring. "Hard" armoring refers to engineered structures such as seawalls, revetments, caisson and pier elevation, and bulkheads that defend against coastal hazards like wave impacts, erosion, and flooding. "Soft" alternatives refer to the use of natural or "green" infrastructure like beaches, dune systems, wetlands, and other engineered systems to buffer coastal areas. Strategies like beach nourishment, dune management, or the construction of "living shorelines" capitalize on the natural ability of these systems to protect coastlines from coastal hazards while also providing benefits such as habitat, recreation area, more natural aesthetics, and the continuation or enhancement of ecosystem services.

Comment [CDA28]: Piers used to elevate structures out of the hazard zone are listed here in error. They are not "hard armoring." And rather fall under "Accommodate" i.e. a measure to "modify existing development … to decrease hazard risks and thus increase the resiliency of development to the impacts of sea level rise." Elevating structures through use of piers is more accurately described below under "Adaptive Design (Accommodate)" (page 13). Piers should be consistently defined and described as a design accommodation throughout since different standards apply to shoreline protective devices.

Accommodate: Accommodation strategies refer to those strategies that employ methods that modify existing developments or design new developments to decrease hazard risks and thus increase the resiliency of development to the impacts of sea level rise. On an individual project scale, these accommodation strategies include actions such as retrofits and/or the use of materials meant to increase the strength of development, building structures that can easily be moved and relocated, or using larger setbacks. On a community-scale, accommodation strategies include any of the land use designations, zoning ordinances, or other measures that require the above types of actions, as well as strategies such as clustering development in less vulnerable areas or requiring mitigation actions to provide for protection of natural areas even as development is protected.

Comment [CDA29]: Again, elevation on piers (or otherwise) is an accommodation measure to be listed here. Floodproofing is another accommodation measure that should be called out.

Comment [CDA30]: For internal consistency the distinction between "clustering development in less vulnerable areas" as "Accommodate" and "limit the construction of new development in vulnerable areas" as Retreat should be clarified.

Retreat: Retreat strategies are those strategies that relocate or remove existing development out of hazard areas and limit the construction of new development in vulnerable areas. These strategies include land use designations and zoning ordinances that encourage building in more resilient areas or gradually removing and relocating existing development. Acquisition and buy-out programs, transfer of development rights programs, and conditioning the removal of structures are examples of strategies designed to encourage managed retreat.

[9] McGuire, C. J. Adapting to sea level rise in the coastal zone: Law and policy considerations. CRC Press, 2013.

For purposes of implementing the Coastal Act, no single category or even specific strategy should be considered the "best" option as a general rule. Different types of strategies will be appropriate in different locations and for different hazard management and resource protection goals. The effectiveness of different adaptation strategies will vary across both spatial and temporal scales. In many cases, a hybrid approach that uses strategies from multiple categories will be necessary, and the suite of strategies chosen may need to change over time to address increased sea level rise and associated increased exposure to hazards. The legal context of various options will also need to be considered in each situation and ultimately, adaptive responses will need to be consistent with the Coastal Act. Thus, Figure 1 shows the basic conceptual stages that communities can step through when developing an adaptation plan: 1) Evaluate hazards and vulnerable areas; 2) Identify the assets at risk (built and natural environments); 3) Analyze alternative adaptation strategies; 4) Apply a legal framework to inform feasible adaptation strategies (*See* Section 4. Legal Considerations); and 5) Identify feasible, preferred adaptation strategy.

Comment [CDA31]: Marin County strongly supports this basic tenet.

Comment [CDA32]: It would be very valuable if the Draft Policy Guidelines could elaborate and describe specific examples how various areas have implemented these "adaptation pathways" into the future either in long term plans or in on-the-ground experience.

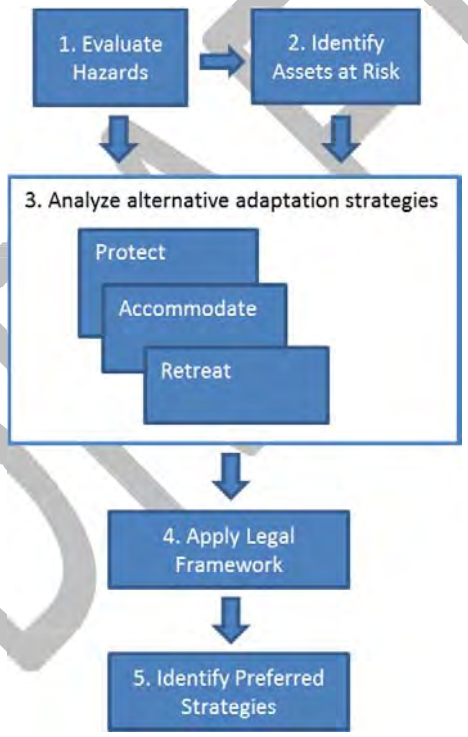


Figure 1. Planning Framework

Analyzing Alternative Adaptation Strategies

To comprehensively address sea level rise, communities must effectively communicate future vulnerabilities to the public, property owners, local governments, and other stakeholders. This can be done by involving the public and decision makers in early discussions of the coastal hazards, assets at risk, potential cost estimates, and visioning for the future shoreline using short and long-term adaptation goals. This process can educate stakeholders and help decision makers prioritize certain actions that are quickly identified as advantageous. From an economic perspective, understanding the costs and benefits of adaptation strategies will help communities identify and prioritize approaches for the LCP policies that will address sea level rise impacts.

When adaptation can address a large risk of near term harm immediately, and still provide benefits in the future, the economics can provide incentives for action. [10] In some cases, beach replenishment, wetland protection, or even elevating structures might fall into this category. By addressing risk with adaptation strategies that protect ecosystems, ensure public access, and avoid hazards, communities can work to enhance their coastal resources before resource loss occurs. Additionally, strategies that have a small cost to reduce risk should be a part of a community's adaptation framework. Some of these policies might refer to setback requirements, mobility designs for structures that could be moved, and larger drainage system requirements. Investments for the community and property owners that reduce risk in the present and still provide immediate value are a first tier of adaptation policy considerations.

In the case of expensive or complex adaptation strategies, another approach that community scale adaptation policies offer is one of reserving expenditure until certain triggers are met. These types of policies apportion risk over time and allow for the use of adaptation options closer to the time they are needed, rather than building now for the worst case future condition. When adaptation triggers cross a threshold (such as a designated beach width reduction or occurrence of flooding), policies would call for specified actions (such as sediment management activities). Other triggers, such as repetitive loss of properties or mean high tide line encroachment, might be used to shift risk to property owners through higher insurance rates, prohibiting hard armoring, or implementing rolling easements that specify how the public trust boundary moves inland.

A community visioning process and development of an adaptation plan are vital to scoping the appropriate strategies a community will phase over time to address hazards as they become manifest. In preparing an adaptation plan, communities should consider all of their options and evaluate them according to impact on coastal resources, effectiveness at reducing risk, costs, and feasibility (technical, legal, social, or political).

Siting New Development (Avoid)

Again, avoiding flooding and erosion and other such coastal hazards through setbacks, siting, and design decisions that locate development at safe distances from potential hazards should be the first consideration for all types of development. However, the details for determining setback distances and trigger conditions will need customization to local conditions. Providing for exceptions where there is a need to permit some form of new development in a hazardous area in order to avoid an unconstitutional taking of private property, local governments can plan for

Comment [CDA33]: This is an extremely important fundamental principle that should be highlighted, and consistently used when evaluating LCPs, and particularly any part of Adaptation Plans integrated into the LCP.

Comment [CDA34]: This too is a fundamental principle. The products and LCP provisions developed through a strong community engagement should be given great weight in reviewing the LCP.

Comment [CDA35]: Marin County agrees with this approach.

[10] McGuire, C. J. Adapting to sea level rise in the coastal zone: Law and policy considerations. CRC Press, 2013.

protection of coastal resources without a total loss of economic use of a residential property. Policies B.1 – B.10 provide examples of these relevant siting policies and takings analysis.

Hard Shoreline Armoring (Protect)

Traditional approaches to managing coastal erosion and flood risk have relied on hard armoring of the shoreline. The type of armoring chosen (e.g., bulkheads, caissons, revetments, or seawalls) depends on geomorphic context and the structures all have varying costs and environmental impacts. "Holding the line" strategies using various types of hard armoring are often implemented on a parcel by parcel basis, but in some cases neighborhood scale implementation could be proposed. Shoreline armoring can serve to protect critical infrastructure and public access, and maintain community services for some period of time, after which, it may be appropriate to begin planning for the orderly relocation of development. However, shoreline armoring causes adverse impacts to coastal resources, including beaches, which will need to be mitigated.

California beaches, both wide sandy beaches and pocket beaches, as well nearshore coastal areas, are significant financial assets to coastal communities and the state.[11] Beaches and other shoreline areas also provide remarkable ecological value, including unique and important ecological services such as filtering water, recycling nutrients, buffering the coast from storm waves, and providing critical habitats for hundreds of species. When hard structures are used to protect the backshore, they form barriers that impede the ability of natural beaches and habitats to migrate inland over time and reduce sources of sand supply created by erosion, meaning public recreational beaches, wetlands, and other low-lying habitats will be lost as sea level continues to rise. This process is commonly referred to as "passive erosion" or "coastal squeeze" which is the narrowing of beaches due to the fact that the back of the beach on an eroding shoreline has been fixed in place. Sea level rise will thus eventually result in the "drowning" of intertidal and low-lying habitats, and loss of certain surfing resources, against a hardened shoreline if this adaptation strategy is perpetuated far into the future.

Hard armoring can also result in nuisance conditions for neighbors who suffer increased flooding or erosion as result of nearby armoring, as well as reduced public access along the shoreline. Other detrimental impacts may include negative visual impacts, recreation impacts (e.g., surfing limitations, reduced beach access), and interference with other ecosystem service functions. The effectiveness of hard armoring to protect development will also be reduced as sea level rises and storm intensity and frequencies increase. Relatedly, shoreline armoring costs will increase over time as coastal hazards and storms cause elevated levels of damage and increasing frequency of need for repair and maintenance. Policies F.1 – F.10 provide examples of policies that can be used to define the appropriate circumstances for hard armoring, and to promote transition from hard protection strategies to others that are more protective of coastal resources.

Soft Shoreline Protection (Protect)

Design of shoreline protection using "soft" measures or nature based solutions is another type of adaptation that can protect both development and coastal resources such as beaches. Strategies like beach nourishment, dune management, or the construction of "living shorelines" capitalize on

Comment [CDA36]: We appreciate that piers used to elevate structures are not included here. Perhaps for clarity it should be explained where the referenced caissons come into play, e.g. as support for seawalls or to reinforce bluffs.

Comment [CDA37]: To be a balanced discussion of "financial assets", this section acknowledge the property tax, visitor and sales taxes accrued from coastal property uses (i.e. funding to state which would be preserved to some extent through accommodation strategies.

Comment [CDA38]: Is there best available science that describes the consequences to current beaches if there is no backshore development. To what degree will sea level inundate and erode beaches in any case?

[11] In recent years, California tourism and recreation in the shore adjacent zip codes accounts for 39 percent of the ocean economy's GDP ($17.6 billion), 75 percent of its employment (368,000) and 46 percent of its wages paid ($8.7 billion) in 2012. (NOAA Report on the National Significance of California's Ocean Economy. 2015. https://coast.noaa.gov/data/digitalcoast/pdf/california-ocean-economy.pdf)

the natural ability of these systems to protect coastlines from coastal hazards while also providing benefits such as habitat, recreation areas, more pleasing visual impacts, and the continuation or enhancement of ecosystem services. This approach is often considered a way of extending the useful life of existing development setbacks. Because this approach is a somewhat newer concept in high energy wave environments, the effectiveness and impacts of many soft shoreline projects are in the early phases of implementation and will need additional monitoring. The cost of many nature based solutions can be high, and the longevity of engineered habitats given sea level rise remains to be observed.

In addition, it should be noted that the term "soft" protection can refer to shoreline restoration projects, or to shoreline armoring that includes a natural component, such as a revetment that is buried beneath sand and vegetated. While the former may be a permissible restoration project in many circumstances, the latter constitutes shoreline armoring that can generally only be approved if it is necessary to protect an existing structure or coastal dependent use and is the least environmentally damaging feasible alternative, as required by the Coastal Act.

Policies E.2 (Soft Shoreline Protection), F.2 (Prioritization of Types of Shoreline Armoring), and G.5 (Beach Nourishment) provide examples of relevant to soft shoreline protection.

Adaptive Design (Accommodate)

Building codes and adaptive home designs can provide resiliency when development in hazardous areas cannot be avoided. Design requirements related to building type and hazard zone type are common in Federal Emergency Management Agency (FEMA) flood zones. Local governments could adopt similar requirements in LCPs for elevating structures, floodproofing designs, or siting structures in ways that can accommodate flooding and erosion. In the short term, adaptive design can provide cost savings to residents in coastal hazard areas and extend the amount of time they can remain in a location that will suffer increasing damages due to sea level rise impacts. Implementing adaptive design that is in sync with FEMA risk reduction criteria also offers adaptation incentives for property owners in FEMA flood zones who might reduce their flood insurance rates.

Although these accommodation strategies can minimize hazards and ensure the safety and stability of new development, they can also lead to adverse impacts on coastal resources. For example, elevation of homes can cause visual impacts by blocking coastal views or detracting from community character. Elevation can lead to a circumstance where houses are safe but utilities, including roads, water and sewer services may be compromised. Pile-supported structures may, through erosion, develop into a form of shore protection that interferes with coastal processes, blocks access, and, at the extreme, results in structures looming over or directly on top of the beach. Finally, elevation, floodproofing, and other accommodation measures can also lead to a scenario where the beach and public trust lands migrate up and underneath or around the structure, blocking public access and the migration of habitat and infringement on public trust lands.

The strategy of using adaptive design to protect coastal resources and enable new development requires coupling with restrictions on hard armoring in order to minimize the coastal squeeze and other coastal resource impacts. In the short term, design accommodation might prevent structural damages from single storms, but in the long term these structures might have impacts on migrating habitats and public access and/or be subject to consistent threats from storm damage. In

Comment [CDA39]: [Please OPEN Reviewing Pane to see full comments. They are also appended at the end.]

Comment [CDA40]: Since the Draft Policy Guidance advocates the current use of soft measures, it would be helpful to local governments to have information about where "living shorelines" have been implemented along the open coast, including beach areas, and, if available, data on their cost vs. performance.

Comment [CDA41]: Under Coastal Act Section 30235, referenced construction must meet the standards of "designed to eliminate or mitigate adverse impacts on local shoreline sand supply" not the "least environmentally damaging feasible" standard. Section 30235 addresses the requirements for the referenced construction in specific terms, taking precedence over more general standards. While local governments often choose to implement the least environmentally damaging alternative, our concern here, in part, is with the Draft Policy Guidance reaching beyond the four corners of the Coastal Act. The Draft Policy Guidance should make clear distinctions between the statutory limits of the Coastal Act and proposed policies that would expand those limits.

Comment [CDA42]: Please clarify if FEMA does currently allow floodproofing for residential structures in lieu of elevating.

Comment [CDA43]:

Comment [CDA44]: This is precisely the approach Marin County has taken through its proposed LCP amendments, and the support here is appreciated.

Comment [CDA45]: Speculation needs to be tempered by the wise planning principles articulated in numerous places above (e.g. pg.11) that counsel "reserving [actions] until certain triggers are met. … apportion risk over time and allow for the use of adaptation options closer to the time they are needed, rather than building now for the worst case future condition."

Local governments can take these potential longer term impacts into consideration for defining Adaptation pathways and promoting public understanding of the challenges that subsequent generations will need to address.

Comment [CDA46]: Local governments should be allowed to establish the reasonable balance between protecting the safety of coastal residents, business owners and visitors and impacts to coastal views.

Comment [CDA47]: Please expand on how this would occur.

Comment [CDA48]: Are there examples of this? Couldn't the habitat still exist?

Comment [CDA49]: Are there case studies and best available science to support this assertion?

these cases, eventual structural relocation or removal might be the most appropriate response to protect coastal resources and life and safety.

Policies C.1 (Adaptive Design) and E.4 (Flood Hazard Mitigation) provide examples of adaptive design policies.

Managed Retreat (Retreat/Realignment)

An alternative to holding the line, or protecting shorelines with armoring, is a retreat-based approach. Managed retreat refers to varying approaches to managing coastal hazard risk by structure relocation and/or abandonment of land.[12] These strategies can result in a landward redevelopment pattern and a managed realignment of development along the coast so that natural erosion and other coastal processes, including beach formation/creation, can continue.

Benefits of managed retreat strategies include allowing for the natural landward migration of the beach, dunes and wetlands as sea levels rise; decreasing hazard risk; protecting coastal resources on the water's edge; and savings on potential costs of construction, maintenance, and repair of shoreline protective devices. Managed retreat strategies for adapting to sea level rise have been found to be more cost-effective than maintaining armoring over timescales greater than 25 years.[13]

The feasibility of managed retreat and realignment strategies depends on a number of factors, but the willingness of residents to participate in voluntary programs and the short term costs of buyouts for local governments pose significant challenges for implementation. To build support for long term consideration of the retreat and realignment approach, communities will need to engage in such actions as community visioning, conducting economic analysis of adaptation options, and offering incentives for participation.

Selecting, financing, and promoting a managed retreat program will likely require a community scale approach to managing coastal hazards (Policy G.1) and creation of an Adaptation Plan (Policy G.2). Managed retreat programs (Policy G.9) can be structured using a variety of triggers and mechanisms. Acquisition and buyout programs, transfer of development rights programs, repetitive loss triggers (Policy G.7), and beach width triggers nested within a Beach Management Plan (Policy G.8) are some examples of potential managed retreat program components. Again, a community visioning process is the first step for communities to take in order to explore the potential for such an adaptation approach.

Advanced planning might open doors for other resources to be available to communities doing LCP development to address sea level rise. See the section on Coordination and alignment with other planning processes for more information on potential funding opportunities.

Comment [CDA50]: Local governments can take these potential longer term impacts into consideration and develop contingent responses

Comment [CDA51]: What about the possible negative impacts of retreat? Breaking up existing communities, local economic losses as the critical mass relocates elsewhere, loss of sense of place, loss of cultural resources, displacement of lower income residents who cannot afford to move, environmental impacts of new construction including GHG emissions which exacerbate climate change, straining existing community infrastructure with influx of new relocated residents, and several other consequences. Cons were described for the other strategies, why not this one?

Comment [CDA52]: The study cited for this conclusion looked at a rural area of North East England (Humber Estuary) with presumably vastly lower land/development values. Highly questionable to apply these findings to California.

Comment [CDA53]: It's hard to imagine a community "visioning" itself out of existence absent major financial incentives. Millions of dollars were allocated for managed retreat subsequent to Superstorm Sandy. It would be helpful guidance to describe how these programs worked out.

Comment [CDA54]: This expansive view of the obligations of a local government under an LCP is far beyond the scope set out by the Coastal Act, and under Section 65302 of the Government Code are principally addressed in the Safety Element and Local Hazard Management Plan.

[12] Hino, M., Field, C.B. and Mach, K.J., 2017. Managed retreat as a response to natural hazard risk. *Nature Climate Change*.

[13] Turner, R.K., Burgess, D., Hadley, D., Coombes, E. and Jackson, N., 2007. A cost–benefit appraisal of coastal managed realignment policy. *Global Environmental Change*, 17(3), pp. 397-407.

4. Legal Considerations

As part of fully evaluating available adaptation strategies, communities should analyze their ability to implement those strategies consistent with applicable legal constraints. The most relevant legal considerations in coastal California include the Coastal Act, the public trust doctrine, and potential takings of private property interests.

Relevant Coastal Act Policies

A variety of Coastal Act policies related to sea level rise adaptation strategies need to be considered when evaluating LCP policy options. For example, in addition to other Coastal Act Chapter 3 policies, Sections 30210 through 30224 protect public access and recreational opportunities; Sections 30230 and 30231 protect marine habitats and water quality; Section 30233 regulates and restricts the placement of fill or other materials in waterways, including open coastal waters; and Section 30251 protects visual resources. In addition, Sections 30235, 30253, and 30240(b) generally apply. Certified local coastal programs should have policies that implement these Coastal Act requirements.

Section 30233 states in part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> . . .
>
> *(6) Restoration purposes.*
>
> *(7) Nature study, aquaculture, or similar resource dependent activities.*

Section 30235 states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes 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. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.*

Section 30253 states in part:

> *New development shall do all of the following:*
>
> *(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(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...

Section 30240(b) states:

> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30253 requires new development to minimize risks from hazards, to avoid erosion and geologic instability, and to not in any way require construction of armoring that substantially alters natural landforms along bluffs and cliffs. A common way to achieve these requirements is through establishing bluff-top and shoreline setbacks. Despite this strict limitation on shoreline armoring for new development, Section 30235 allows armoring that alters natural shoreline processes when it is needed to protect existing development, coastal dependent uses, or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. However, such protection is only allowed if it is *required* – i.e., if the existing structure is in fact in danger, and the proposed shoreline protection is the least environmentally-damaging alternative to abate the danger.

As described in the Commission's 2015 Sea Level Rise Policy Guidance, the Commission interprets "existing" development in Section 30235 as development that was in existence when the Coastal Act was passed. In other words, Section 30235's directive to allow shoreline armoring in certain circumstances only applies to development that existed as of January 1, 1977. This interpretation is the most reasonable way to construe and harmonize Sections 30235 and 30253, which together evince a broad legislative intent to allow armoring for development that existed when the Coastal Act was passed, but avoid such armoring for new development now subject to the Act. This interpretation, which essentially "grandfathers" development that predates the Coastal Act, is also supported by the Commission's duty to protect public trust resources and interpret the Coastal Act in a liberal manner to accomplish its purposes.

In the narrow class of cases subject to Section 30235, the Commission has generally approved shoreline armoring that meets the criteria specified in that provision, though imposed conditions to address impacts to coastal resources protected by other Coastal Act provisions. However, for residential development that does not qualify as "existing" development, shoreline armoring is disallowed if it is inconsistent with Section 30253 and/or other Chapter 3 policies of the Coastal Act. Thus, for development that does not qualify as "existing," jurisdictions will generally need to consider adaptation strategies other than using shoreline armoring. For example, appropriate strategies might include non-structural protective methods, such as beach nourishment and dune restoration, as well as accommodation and retreat.

Section 30240(b) requires the siting and design of development to prevent significant degradation of adjacent sensitive habitats and recreation areas under present and future conditions. Thus, new residential development could not rely on long-term accommodation through elevation or floodproofing if such elevation or floodproofing would foreseeably lead to a circumstance in which the residence is located on pilings above, or in the middle of, the migrated public sandy beach or public trust lands, because such development would degrade that recreational area and

Comment [CDA55]: The standard is Eliminate OR Mitigate. The Draft Policy Guidance should more clearly articulate that under current law eliminating existing development is not the only option and that minimizing or lessening adverse impacts is also permitted.

Comment [CDA56]: As noted, under Coastal Act Section 30235 specified shoreline construction must meet the standards of "designed to eliminate or mitigate adverse impacts on local shoreline sand supply" not the "least environmentally damaging feasible" standard. Section 30235 addresses the requirements for the referenced construction in specific, taking precedence over more general standards.

Comment [CDA57]: The 2015 Policy Guidance is not law or regulation, and in any event "existing" should be taken at its plain meaning, just as the Commission argued in Surfrider Foundation v. California Coastal Commission, with Judge Warren agreeing and ruling that "the term "Existing Structures" refers to Existing Structures at the time of the permit application."
For the record - reasons cited by Commission in Surfrider v. CCC case supporting argument that "existing" means "currently existing" NOT "existing as of 1977" include:
1. The term "existing" appears at least 15 times in Chapter 3 of Coastal Act and each time refers to currently existing conditions.
2. It would make little sense to evaluate permit applications under conditions as they existed 30 or more years ago…
3. It is not consistent with Legislative intent to interpret term to prohibit approval of seawalls for post-Coastal Act structures regardless of how much life and property might be lost.
4.In cases where the Legislature intended for "existing" to mean something other than "currently existing", they included a specific date (for example, Section 30610.6 refers to "legal lot existing…on the effective date of this section"
5. CCC's brief states that the Commission "has consistently interpreted Section 30235 to refer to structures that existed at the time of application" (and cites Commission's chief counsel's testimony during the public hearing as proof).
6. Concluding comment from CCC brief "The Commission is not aware of a single instance in the history of the Coastal Act in which it has determined that "existing structures" in 30235 refers only to structures that predated the Coastal Act."

Comment [CDA58]: How does this apparently new statutory interpretation square with many seawalls the Commission itself approved under Section 30235? Neither the 2015 Guidance nor this proposed extension should attempt to rewrite the law. This paragraph should be deleted.

Comment [CDA59]: Section 30240(b) does not contain the language "under present and future conditions." The Draft Policy Guidance should not be written to change the Coastal Act

would be incompatible with the continuance of the public recreational area as it migrates inland.

Section 30233 disallows the filling of coastal waters unless there is no feasible less environmentally damaging alterative, mitigation measures are provided, and the filling is for one of seven enumerated purposes – e.g., for certain coastal-dependent structures, restoration purposes, or aquaculture or other resource dependent activities. Placement of rock or other fill material for revetments or most shoreline armoring is not a resource dependent use, and would therefore generally be disallowed. However, dune restoration and some beach nourishment/restoration projects might qualify as permitted restoration activities. In addition, notwithstanding Section 30233, fill may also be allowed in narrow circumstances when required in order to protect "existing" development or coastal dependent uses under Section 30235. Permits for shoreline armoring should also include conditions to address compliance with other applicable Coastal Act or LCP requirements.

These policies, and LCP policies based on them, will limit the allowable adaptation strategies in certain cases. For example, new residential development generally may not rely on existing or new shoreline armoring to address coastal erosion, sea level rise, and related coastal hazards. This is because such shoreline armoring generally has negative impacts on natural shoreline processes, public access, visual resources, recreational resources, and intertidal and other important habitat, and is therefore not allowed pursuant to various Chapter 3 policies of the Coastal Act. However, it may be appropriate to rely on existing shoreline armoring to protect new residential development in some limited cases. For example, it may be appropriate for new development in developed urban areas that are protected by preexisting bulkheads to rely on retention and/or expansion of those bulkheads for an appropriate period of time if such retention/expansion is technically feasible (including considering rising groundwater levels), will provide adequate protection for the anticipated life of the project, and will not: (1) alter natural shoreline processes along bluffs or cliffs, (2) impair public access or impede public trust uses of the water,[14] (3) cause significant adverse visual impacts, (4) negatively impact marine habitat, or (5) otherwise conflict with Chapter 3 resource protection policies.

In addition, new or redeveloped homes may be able to rely on existing armoring to protect them if that armoring is independently needed in order to protect nearby coastal-dependent development or beaches. Likewise, shoreline armoring may be an allowable adaptation strategy, at least in the short-term, in order to protect areas where new and existing residential development are intermingled and it is not feasible to have the shoreline armoring only protect the existing development. Finally, it may be permissible in some cases to allow new development to rely on existing or new armoring if disallowing such development would constitute an unconstitutional taking of private property without just compensation (see section on Addressing Takings Concerns, below).[15] However, this is more likely to be the case on an empty lot where there is not any current economic use of the property. In the case of redevelopment of a current home, denial of redevelopment generally would not "take" all economic use or otherwise constitute a taking because there is already an existing economic use of the property. As described in Chapter

[14] In some cases, maintaining bulkheads may benefit public access by helping to maintain publicly accessible, navigable waterways, or public paths on top of the bulkheads. However, in general, any seaward expansion or encroachment by a bulkhead on shoreline area used by the public would constitute a negative impact to public access.

[15] Pub. Res. Code § 30010.

Comment [CDA60]: This is a highly speculative and presumptuous statement that appears to have been included in the Guidance without sufficient deliberation regarding if and how flood proofing and elevating structures will be prohibited under the Coastal Act based on foreseeable future circumstances. How will "foreseeably" be determined, under what time frame and set of assumptions? Will it be determined by the hazards analysis submitted by the permit applicant? Rather than basing current decision making on a future worst case scenario, shouldn't this be an area of the Guidance where adaptive management is recognized as a means of addressing future conditions as they become better known and more predictable?

Comment [CDA61]: "construction that alters natural shoreline processes" is specifically and solely regulated by Section 30235.

Comment [CDA62]: The Coastal Act regulates "development," not existing authorized structures and uses. We don't see a sufficient nexus to require a property owner to remove an existing legal shoreline protective device because the proposed definition of "redevelopment" requires a Coastal Development Permit for replacing a portion of the homes subfloor, foundation or siding. Similarly, the Coastal Act does not provide that the retention of existing bulkheads can be made subject to the conditions enumerated here. Without a convincing legal analysis as to how these types of substantive changes clearly comport with the Coastal Act, we strongly recommend this paragraph be deleted.

Comment [CDA63]: This is an important observation, and in Marin's case existing residential development by far outnumbers any potential new development.

Comment [CDA64]: As previously stated, the proposed definition of "redevelopment" is an overly expansive change in regulations despite the explicit assertion that the Guidance do not constitute new regulations, and is not supported by the Coastal Act. Additionally, please address whether denying the elevation of a house above the hazard Base Flood Elevation to increase the likelihood of flooding, storm related damage and eventual loss would allow enough economically viable use to avoid a takings? This is an important issue to local governments if they are expected to adhere to and defend this legal conclusion through their local permit decisions. The rationale that "there is already an existing economic use of the property" seems flimsy without more legal analysis.

Comment [CDA65]: This is an important caveat that should be stated clearly in the document, not relegated to a footnote.

8 of the Commission's Sea Level Rise Policy Guidance, local jurisdictions will need to consider the specific legal context and circumstances that apply to each area or case when undertaking shoreline armoring-related LCP updates or approving individual development projects that include shoreline armoring.

Although coastal armoring generally has significant adverse impacts on coastal resources, there are situations—as described above—where armoring may be lawfully allowed and may represent a reasonable short- to mid-term adaptation strategy at a street/neighborhood-level or community-scale. This may be especially true in urbanized areas where existing residential development and/or critical infrastructure exist, where development is already protected by armoring, where the impacts of armoring on natural shoreline processes will be minimal due to the geology of the area and where the armoring is the least environmentally damaging alternative for adaptation. However, to the extent that LCP policies—or projects approved pursuant to them— allow for shoreline armoring, local governments must ensure that such policies and projects safeguard coastal access, mitigate for all impacts to coastal resources affected by armoring, and protect public trust resources. Again, as described in Chapter 8 of the Commission's Sea Level Rise Policy Guidance, local jurisdictions will need to consider the specific legal context and circumstances that apply to each area or case when undertaking shoreline protection-related LCP updates or approving individual development projects that include shoreline protection. When deciding on and developing policies to support an adaptation strategy that may include armoring in an LCP, local governments should consider working closely with Coastal Commission staff in crafting such land use policy language to address this unique and special circumstance and to be consistent with Coastal Act policies.

Comment [CDA66]: Under the Coastal Act 30235, this is true in any location when found " to protect existing structures"

Public Trust Doctrine

Background on Public Trust Doctrine

The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The state holds and manages these lands for the benefit of all people of the state for statewide purposes consistent with the common law public trust doctrine ("public trust"). The public trust ensures that title to sovereign land is held by the state in trust for the people of the state. Public trust uses include maritime commerce, navigation, fishing, boating, water-oriented recreation, visitor-serving facilities and environmental preservation and restoration. Non-water dependent uses such as residential and general office or commercial uses are generally inconsistent with public trust protections and do not qualify as public trust uses.

In coastal areas, the landward location and extent of the state's sovereign fee ownership of these public trust lands are generally defined by reference to the ordinary high water mark,[16] as measured by the mean high tide line;[17] these boundaries remain ambulatory, except where there has been fill or artificial accretion. More specifically, in areas unaffected by fill or artificial accretion, the ordinary high water mark and the mean high tide line will generally be the same. In areas where there has been fill or artificial accretion, the ordinary high water mark (and the state's public trust ownership) is generally defined as the location of the mean high tide line just prior to the fill or artificial influence. It is important to note that such boundaries may not be readily

Comment [CDA67]: Please confirm the ambulatory line is based on NGVD 1988 and will be updated next in 2022.

Comment [CDA68]: It would be helpful to further explain how a local government would operationally determine the historical MHTL. Are there survey reports delineating that line using the appropriate tidal datum at the time the structure was built or some other way to determine where the line was, and under law then now exists?

[16] Civil Code § 670.

[17] *Borax Consolidated v. City of Los Angeles* (1935) 210 U.S. 10.

apparent from present day site inspections.[18]

The mean high tide line is the intersection of the shoreline with the elevation of the average of all high tides calculated over an 18.6-year tidal epoch. This property line is referred to as "ambulatory" for two reasons: first, gradual changes to the shoreline due to factors such as variations in the height and width of sandy beaches, shoreline erosion or accretion, and uplift or subsidence of land can change the location of where the mean high tide line meets the shoreline. Second, the elevation of the mean high tide line itself changes over time and is likely to increase at an accelerating rate in the future due to sea level rise. Over time, sea level rise will continue to gradually cause the public trust boundary to move inland. Boundaries between publicly-owned waterways and adjoining private properties (referred to as littoral if they are along lakes and seas and riparian if along rivers and streams) have always been subject to the forces of nature and property boundary law reflects these realities.

Accelerating sea level rise will likely lead to more disputes regarding the location of property boundaries along the shoreline, since lands that were previously landward of the mean high tide line have become subject to the state's ownership and protections of the public trust. These disputes, in turn, will affect determinations regarding what kinds of structures and uses may be allowed or maintained in areas that, because of sea level rise, either are already seaward of the mean high tide line, are likely to become seaward of the mean high tide line in the future, or would be seaward of the mean high tide line if it were not for artificial alterations to the shoreline.

Comment [CDA69]: Is the State Lands Commission entrusted with making, arbitrating, or taking legal action to enforce these determinations as part of its exclusive jurisdiction described below, or is the Coastal Commission sharing or assuming some of that authority?

California case law does not explicitly address how shoreline structures such as seawalls that artificially fix the shoreline temporarily and prevent inland movement of the mean high tide line affect property boundaries, if at all. The Ninth Circuit Court of Appeals, however, has interpreted federal common law as allowing the owner of tidelands to bring a trespass action against a neighboring upland property owner who built a revetment that prevented the natural inland movement of the mean high tide line. The court ruled that the actual property boundary was where the mean high tide line would have been if the revetment were not there and that the owner of the tidelands could require the upland owners to remove the portions of the revetment that were no longer located on the upland owners' properties.[19]

Comment [CDA70]: This is a tenuous legal basis upon which to establish a statewide regulatory scheme.

Coastal Commission and Local Government Public Trust Authority and Duties

The public trust gives the state the authority to manage tidelands and also imposes a duty to protect the public's interests in those tidelands.[20] The Legislature has broad authority to implement the public trust and to delegate authority over tidelands to state agencies or local governments. The State Lands Commission has exclusive jurisdiction over ungranted tidelands owned by the state,[21] as well as residual jurisdiction over tidelands granted to local trustees.[22] The Legislature has also granted to the Coastal Commission the authority to regulate and permit development within California's coastal zone, including development on tidelands or that may

[18] *Carpenter v. City of Santa Monica* (1944) 63 C. A. 2nd 772, 787.
[19] *United States v. Milner* (9th Cir. 2009) 583 F.3d 1174, 1189-1190.
[20] *Nat'l Audubon Soc'y v. Superior Court* (1983) 33 Cal.3d 419.
[21] Pub. Res. Code §§ 6301, 6305, 6009.
[22] *State of Cal. ex rel. State Lands Com. v. County of Orange* (1982) 134 Cal.App.3d 20.

affect tidelands.[23] In cases where development is proposed on tidelands, the applicant will need to obtain a lease or other appropriate authorization from the State Lands Commission or the appropriate tidelands grantee in addition to an appropriate development approval from the Coastal Commission.

When local governments approve development pursuant to a certified Local Coastal Program or other authority under the Coastal Act, they also have a responsibility to protect public trust resources associated with tidelands. Although the Coastal Commission retains the authority to issue coastal development permits for development located on tidelands,[24] local governments are obligated to have policies that regulate development on adjacent uplands in a manner that protects tidelands.[25] Local governments also play a critical role in protecting uplands that will likely become tidelands in the future due to sea level rise.

In describing the state's duty to protect public trust lands, the California Supreme Court has ruled that state agencies have a duty to "exercise […] continuous supervision and control over the navigable waters of the state and the lands underlying those waters."[26] Thus, when considering whether to approve projects that may affect public trust lands, agencies must consider the effects that the projects will have on "interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests."[27] Development located *on* tidelands must generally be water dependent or otherwise consistent with the public trust. As the State Lands Commission has articulated: "[u]ses that are generally not permitted on public trust lands are those that are not trust use related, do not serve a public purpose, and can be located on non-waterfront property, such as residential and non-maritime related commercial and office uses."[28] If there are competing trust-related uses of public trust lands, trustee agencies have significant authority to choose which use or uses to allow, though should attempt to reconcile competing trust uses or allow multiple uses when feasible.[29] For development located *near* tidelands, agencies must ensure that the development does not impair trust resources by, for example, impeding public access.[30]

Another underpinning of the public trust doctrine is that "[t]idelands subject to the trust may not be alienated into absolute private ownership; an attempted conveyance of such land transfers 'only bare legal title,' and the property remains subject to the public trust easement."[31] Although

Comment [CDA71]: It would be extremely helpful if the Coastal Commission could work with the SLC to provide local governments easy access to accurate, updated, digital maps of these areas (it's difficult to regulate an area where the boundaries are unknown or unclear).

Comment [CDA72]: We note the qualifier "generally."

[23] Pub. Res. Code §§ 30000 et seq., 30519(b).
[24] Pub. Res. Code § 30519(b).
[25] E.g., Pub. Res. Code §§ 30230, 30231, 30232, 30235, 30240, 30253.
[26] *Nat'l Audubon Soc'y,* 33 Cal.3d at 425.
[27] *Id*. at 426.
[28] CALIFORNIA STATE LANDS COMMISSION, PUBLIC TRUST POLICY FOR THE CALIFORNIA STATE LANDS COMMISSION, available at http://www.slc.ca.gov/About_The_CSLC/Public_Trust/Public_Trust_Policy.pdf; see also *Lechuza Villas West v. Cal. Coastal Comm'n* (1997) 60 Cal.App.4th 218 (upholding Coastal Commission's denial of permit for residential development due to concern that it would be located partly on tidelands).
[29] *Carstens v. Cal. Coastal Comm'n* (1985) 182 Cal.App.3d 277, 289; *Nat'l Audubon Soc'y,* 33 Cal.3d at 440; *State of California v. San Luis Obispo Sportsman's Assn*. (1978) 22 Cal. 3d 440, 448.
[30] See Pub. Res. Code § 30211; *Nat'l Audubon Soc'y*, 33 Cal.3d at 435-37 (agencies have duty to consider how use of non-trust resources affect public trust waters).
[31] *City of Berkeley v. Superior Court* (1980) 26 Cal.3d 515, 537 (quoting *Long Beach v. Mansell* (1970) 3 Cal.3d 462, 482); see also Cal. Const. art. X, § 3; Cal. Pub Res. Code § 7991. However, California courts have carved out a narrow exception allowing alienation of tidelands when the tidelands: 1) are valueless for trust purposes, 2) are

the state may lease trust lands for trust-consistent purposes, or may grant trust lands to public entities, or may lease to private entities subject to the public trust, courts will not interpret legislative action as fully alienating trust interests unless no other interpretation is reasonably possible.[32] This doctrine may affect landowners' ability to construct shoreline armoring that prevents the migration of tidelands, as approval of such armoring could be viewed as allowing the conveyance of what would be public tidelands into private use. At the least, it supports the idea that lawfully permitted shoreline armoring may temporarily prevent the *physical* migration of the shoreline but would not affect the *legal* migration of the boundary between private property and public tidelands.

No court has explicitly ruled on whether the Coastal Commission's or local governments' compliance with the Coastal Act fully satisfies their duty to consider and protect the public trust.[33] However, courts have ruled that compliance with other laws, such as the California Environmental Quality Act ("CEQA"), does not necessarily satisfy an agency's independent obligation to consider public trust impacts.[34] On the other hand, if agencies do in fact consider their public trust duties when analyzing a project's compliance with other environmental laws, that may well satisfy the agency's public trust obligations.[35]

Because the Coastal Act requires protection of public access, coastal habitats, recreation, and other public trust-related resources, analysis of a project's consistency with the Coastal Act (and, by extension, an LCP) may serve as an adequate analysis of a project's consistency with public trust principles. However, to ensure protection of the public trust, agencies should explicitly consider their public trust obligations when crafting LCP policies that govern development affecting tidelands and when considering whether to approve individual development projects that may affect public trust resources. In addition, the public trust doctrine should inform the interpretation of Coastal Act and LCP provisions to ensure that they are carried out in a manner that fully protects the public trust.

Comment [CDA73]: A good reason for the CCC to provide a reliable delineation of these areas to local governments.

The Public Trust and Sea Level Rise Adaptation

Comment [CDA74]: Has SLC been involved in discussions on this topic?

Local jurisdictions should take their public trust duties into consideration when drafting sea level rise adaptation policies. For example, adaptation policies must ensure protection of public trust lands for public trust purposes, including maritime commerce, navigation, fishing, boating, water-

dedicated to a highly beneficial public purpose, and 3) constitute a relatively small part of the whole trust area. *Mansell*, 3 Cal.3d at 485-86; *see also* Pub. Res. Code § 6307 (allowing exchange of tidelands for other lands if numerous factors are met).

[32] *People v. California Fish Co.* (1913) 166 Cal. 576, 597.

[33] But see *Carstens,* 182 Cal.App.3d 277 (holding that Coastal Commission properly exercised its duty to consider various uses of tidelands and to protect public access to such lands when it analyzed a permit amendment's consistency with Coastal Act public access provisions); *Citizens for East Shore Parks v. State Lands Comm'n* (2012) 202 Cal.App.4th 549, 577 (stating that the *Carstens* "court essentially made no distinction between compliance with the [Coastal A]ct and the public trust doctrine.").

[34] Compare *Citizens for East Shore Parks*, 202 Cal. App.4th 549 (agency's CEQA review, which analyzed public trust issues, satisfied the agency's duty to consider public trust issues) with *San Francisco Baykeeper, Inc. v. State Lands Comm'n* (2015) 242 Cal.App.4th 202 (complying with CEQA does not necessarily demonstrate compliance with public trust duties and, where agency failed to explicitly consider public trust obligations during CEQA review, it violated its public trust duties).

[35] *Id*.

oriented recreation, visitor-serving facilities and environmental preservation and restoration. Because private residential development is not considered a public trust use, policies specific to residential adaptation must ensure that residences and any ancillary development, including shoreline armoring, are not located on public trust lands and will not harm public trust resources by interfering with future migration of such trust lands. For development located on land subject to sea level rise and migrating public trust land boundaries, policies should ensure the relocation or removal of private residential development (including shoreline armoring for such development) before it impedes use of public trust land for public trust purposes.[36] Jurisdictions may also want to adopt a policy that requires, as a condition of a permit for new, shorefront development subject to sea level rise, that the landowner submit periodic evidence that the development remains on private property. Policies A.6 (Assumption of Risk), D.1 (Removal Conditions), F.8 (Shoreline Armoring Monitoring), and G.8 (Beach Management Plan) provide examples of how local governments could implement these requirements through their LCPs.

For a more in-depth discussion of the public trust doctrine in California and how it relates to sea level rise, see Center for Ocean Solutions, Stanford Woods Institute for the Environment, the Public Trust Doctrine: a Guiding Principle for Governing California's Coast under Climate Change (2017)[37].

General Principles of Takings Law

Please refer to the 2015 CCC SLR Policy Guidance for more background on the legal context of adaptation planning (Chapter 8. Legal Context).

The United States and California constitutions prohibit public agencies from taking private property for public use without just compensation. Section 30010 of the Coastal Act similarly prohibits public agencies implementing the Coastal Act from granting or denying a permit in a manner that takes or damages private property for public use without payment of just compensation. The classic "takings" scenario arises when a public agency acquires title to private property in order to build a public facility or otherwise devote the property to public use. In 1922, however, the United States Supreme Court ruled that, in certain circumstances, regulation of private property can constitute a taking even if the regulation does not involve acquisition of title to the property. As Justice Oliver Wendell Holmes stated, "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking," (*Pennsylvania Coal Co. v. Mahon* (1922) 260 U.S. 393, 415.)

In the century since then, Courts have struggled to give agencies and property owners a more definite sense of exactly when a regulation "goes too far." The Supreme Court has identified three basic categories of takings that can occur in the context of land use regulation. Different legal

Comment [CDA75]: "Must" is not appropriate for a document that "*is advisory and not a regulatory document or legal standard* " as described for this Guide.

Comment [CDA76]: As acknowledges on Page 20 of the Guidance, there may be other avenues for the circumstances described here:" In cases where development is proposed on tidelands, the applicant will need to obtain a lease or other appropriate authorization from the State Lands Commission or the appropriate tidelands grantee in addition to an appropriate development approval from the Coastal Commission." A policy statement that ensures the relocation or removal of development closes the door to options that may be available through the SLC.

Comment [CDA77]: From a broader societal view, this seems like requiring someone to continually prove their innocence until they are found guilty.

[36] See *Lechuza Villas West,* 60 Cal.App.4th at 225, 243 (describing how a landowner who wishes to construct homes near the shoreline "risk[s] building on land it has legal title to today but which may become tidelands as a result of natural forces," and upholding Coastal Commission's denial of a permit to construct homes near a beach because the applicant "failed to meet its burden of showing that the project would not encroach on [existing] public tidelands.").

[37] Center for Ocean Solutions, Stanford Woods Institute for the Environment. 2017. The Public Trust Doctrine: a Guiding Principle for Governing California's Coast under Climate Change. Available at http://centerforoceansolutions.org/sites/default/files/publications/The%20Public%20Trust%20Doctrine_A%20Guiding%20Principle%20for%20Governing%20Califonia%2527s%20Coast%20Under%20Climate%20Change.pdf.

standards apply depending on what kind of taking is at issue. (See, generally, *Lingle v. Chevron USA, Inc.* (2005) 544 U.S. 528).

The most straightforward test applies to what is variously called a categorical, total, *per se*, or *"Lucas"* takings, which occurs when a regulation deprives an owner of all economically beneficial use of the property (see *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003). An agency that completely deprives a property owner of all economically beneficial use of the property will likely be found liable for a taking unless background principles of property law, such as nuisance[38] or the public trust doctrine,[39] independently restrict the owner's intended use of the property. Courts have generally been very strict about when they apply this test. If any economically beneficial use remains after application of the regulation, even if the value of that use is a very small percentage of the value of the property absent the regulatory restriction, a *Lucas* taking has not occurred.

Where a regulation significantly reduces the value of private property but does not completely deprive the owner of all economically beneficial use, the multi-factor "*Penn-Central"* test applies.[40] This test has no set formula, but the primary factors include the economic impact of the regulation, the extent to which the regulation interferes with distinct, reasonable investment-backed expectations, and the character of the governmental action. When evaluating the character of the governmental action, courts consider whether the regulation amounts to a physical invasion or instead more generally affects property interests through a program that adjusts the burdens and benefits of economic life for the common good. Whether a regulation was in effect at the time an owner acquired title is also a relevant factor, but is not by itself dispositive.[41] Because this test takes such a wide range of factors into account, case law does not provide clear guidance about the situations in which a regulation is likely to qualify as a "*Penn-Central"* taking. A *Penn-Central* claim is unlikely to succeed, however, unless the plaintiff can establish that the regulation very substantially reduces the value of the property.

The third category of takings claims applies to "exactions," that is, government permitting decisions that require a property owner either to convey a property interest or to pay a mitigation fee as a condition of approval.[42] Under the *Nollan/Dolan* line of cases, the agency must establish a "nexus" between the condition requiring a property interest or payment and the effects of the

[38] See *Scott v. City of Del Mar* (1997) 58 Cal.App.4th 1296 (city ordered removal of seawalls that were encroaching onto public beach; court held there was no compensable taking because the seawalls, which obstructed a public right-of-way, were public nuisances).

[39] No published California case has held that the public trust doctrine is a "background principle" that defeats a takings claim. However, given the doctrine's long-standing roots in state law and its basis in the common law, state constitution, and statutory law, commentators have argued that it is an established background principle of property law in the state. *See e.g.*, BILL HIGGINS, INSTITUTE FOR LOCAL GOV'T, REGULATORY TAKINGS AND LAND USE REGULATION: A PRIMER FOR PUBLIC AGENCY STAFF 14. Other states have also found the public trust to be a "background principle" for purposes of takings analysis. *Esplanade Properties, LLC v. City of Seattle* (9th Cir. 2002) 307 F.3d 978, 985; *McQueen v. S.C. Coastal Council* (2003) 354 S.C. 142, cert denied 124 S. Ct. 466 (2003).

[40] *Penn Central Transportation Co. v. City of New York* (1978) 438 U.S. 104.

[41] See *Murr v. Wisconsin* (2017) 137 S. Ct. 1933, 1945 ("The reasonable expectations of an acquirer of land must acknowledge legitimate restrictions affecting his or her subsequent use and dispensation of the property"); *Palazzolo v. Rhode Island* (2001) 533 U.S. 606, 632-633 (O'Connor, J., concurring).

[42] See *Nollan v. California Coastal Comm'n* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374; *Koontz v. St. Johns River Water Management Dist.* (2013) 133 S.Ct. 2586.

project that that property interest or payment is mitigating. That property interest or payment must also be roughly proportional to the impact that it is intended to mitigate. In California, the *Ocean Harbor House* case is a good example of a shoreline structure impact mitigation requirement that was found by the courts to meet the relevant standards of nexus and proportionality.[43]

Addressing Takings Concerns

Sea level rise adaptation policies may potentially give rise to takings concerns. Because the determination of whether a particular policy or regulation may in some circumstances be applied in a way that constitutes a taking is so fact-intensive and context-specific, this Guidance cannot provide a simple set of parameters for when agencies should either allow exceptions to a land use regulation or consider purchasing a property interest. However, the Guidance does provide policy recommendations that could reduce the potential for a successful takings claim.

First, local governments have broad authority to regulate land use. Even actions that may significantly reduce property value, such as rezoning or downzoning in hazardous areas, are possible without generating a successful takings claim, especially if it is clear that the regulation serves a public purpose, such as protecting an existing public recreational beach area, and does not unfairly single out particular property owners. Likewise, legislatively imposed, generally applicable development standards that do not require dedication of private property for public use or payment of money to the public should not be considered "exactions" that are subject to the heightened scrutiny of *Nollan*/*Dolan*.[44] Accordingly, adopting generally applicable development standards through an LCP—such as bluff setbacks, floor elevation requirements, recorded notices of coastal hazards, or specific restrictions on shoreline armoring—may provide a lesser risk of successful takings claims than if such restrictions are imposed on an ad-hoc, permit-by-permit basis.

Comment [CDA78]: Are there cases that address what happens when the action that reduces property value (eg. severe building restrictions) and the intended outcome (providing for future protection of a beach) are widely separated in time?

In addition, local governments can adopt policies that reduce the risks of takings claims. For example, policies requiring assumption of risk, disclosure of hazards, waiver of rights to shoreline protective devices, and disclosure of possible sea level rise and migrating public trust boundaries can ensure that new property owners are on notice regarding the limitations of the property. This, in turn, will help ensure that any such owners have an appropriate, "reasonable investment backed expectation" for the use of the property: namely, that such use will be limited by future hazards, exacerbated by sea level rise.[45]

Land use restrictions that prevent all economically beneficial use of the entirety of a property[46] are vulnerable to *Lucas* takings claims unless those uses would qualify as a nuisance or are prohibited by property law principles such as the public trust doctrine. Agencies can minimize the risk of these claims by allowing economically beneficial uses on some of the property or for a

[43] *Ocean Harbor House Homeowners Assn. v. California Coastal Com*m'n (2008) 163 Cal.App.4th 215.
[44] *Cal. Building Industry Assn. v. City of San Jose* (2015) 61 Cal.4th 435, 461-62.
[45] See *Murr*, 137 S. Ct. at 1946 (owners' expectations about what they may do on their land may be influenced by the fact that it is sensitive coastal land, which may be more heavily regulated by the state).
[46] What qualifies as the entirety of a property can also be the subject of dispute. The property will normally include all legal lots on which the proposed development would be located, but may also include other lots that are in common ownership and adjacent to, or in close proximity with, the lots that would be developed. See *Murr*, 137 S. Ct. at 1946; *Norman v. United States* (Fed. Cir. 2005) 429 F.3d 1081, 1091; *District Intown Properties Limited Partnership v. District of Columbia* (D.C. Cir. 1999) 198 F.3d 874, 880).

certain amount of time, and by exploring whether legal doctrines regarding nuisance or the public trust independently allow for the potential limitations on the use of the property.[47] For example, if a home or seawall would impede public access along the coast, it may be a nuisance, and denial of a permit for the home or seawall—or conditioning of the permit to allow access—should therefore not constitute a taking.[48] Establishing a buyout, leaseback, or transferrable development rights program for properties that are subject to significant development restrictions may also minimize potential exposure to takings claims.

Where a proposed development would not be located on public trust property and would be safe from hazards related to sea level rise in the near future, but cannot be sited so as to avoid those risks over the anticipated life of the structure, agencies may consider allowing the structure, but requiring removal once it is threatened or is no longer on private property. Property owners may argue that they have a right to protect threatened structures even if they have waived rights to shoreline armoring under the Coastal Act, but a recent federal court of appeal ruling casts significant doubt on the existence of any common law right to attempt to fix an ambulatory shoreline boundary through artificial structures such as seawalls.[49] In addition, a California case has held that a homeowner did not have a fundamental right to build a new revetment to protect his home from coastal hazards; rather, any right to build such a structure was subject to legitimate regulation under the Coastal Act.[50]

Local governments could also downzone areas vulnerable to sea level rise to reduce densities and limit development expectations, and they could manage nonconforming structures in order to bring them into conformance with LCP policies within a reasonable period of time. The long-term effectiveness of such a redevelopment-based adaptation strategy depends on at least two factors. First, policies should include clear measures that define the threshold of improvements that constitute "redevelopment." This is critical because, with "redeveloped" properties, the entire structure must be brought up to current LCP standards. In contrast, if the improvements qualify as "repair and maintenance," a landowner could maintain the structure for its remaining life and make minor improvements that meet current standards, but the whole structure need not meet current standards so long as the improvements do not increase the degree of non-conformity of a structure in a hazardous area. Additionally, in some cases, development that qualifies as repair and maintenance may be exempt from permitting requirements.[51] Second, an adaptation strategy should include downzoning of hazardous areas so that buildings destroyed by disasters are not allowed to be rebuilt in place.[52] Instituting rebuilding restrictions in advance of damage will give property owners time to adjust their investment backed expectations and help local governments avoid takings challenges.

If an agency is contemplating requiring property owners to dedicate open space easements or other property interests, or requiring the payment of fees to mitigate project impacts, the agency should be careful to adopt findings explaining how requiring the property interest or payment is

Comment [CDA79]: It appears the intent of the Guidance is to assertively define "redevelopment" so as to circumvent the Coastal Act by reclassifying repair and maintenance and other minor alterations as new development and thereby subject existing development to the new policies being proposed.
Shouldn't this substantive change in law, and related changes, be done through the Legislature as Coastal Act amendments?

Comment [CDA80]: "Repair and maintenance" typically IS exempt (unless ON a beach or within 50 feet of a bluff edge). Sentence should read "in most cases…repair and maintenance IS exempt…"

Comment [CDA81]: Does this refer to new purchases? Aren't investment backed expectations established at the time the investment (purchase of the home) is made based on governing land use laws in effect at that time, not when government changes established rules?

[47] See, e.g., *Scott v. City of Del Mar* (1997) 58 Cal.App.4th 1296.
[48] *Id.*; Civ. Code § 3479.
[49] *United States v. Milner* (9th Cir. 2009) 583 F.3d 1174, 1189-1190.
[50] *Whaler's Village Club v. Cal. Coastal Comm'n* (1985) 173 Cal.App.3d 240, 253-54 (abrogated on other grounds).
[51] Pub. Res. Code § 30610(d); 14 Cal. Code Regs. § 13252. See also any corresponding LCP provisions.
[52] See Pub. Res. Code § 30610 (g)(2)(A) (only allowing reconstruction of structures destroyed by natural disaster if the new structures conform to existing zoning requirements).

both logically related to mitigating an adverse impact of the project and roughly proportional to that impact. Legislatively adopting rules that establish the exact criteria for determining when to require these exactions and, if so, their magnitude, may also reduce an agency's exposure to takings claims.[53] With respect to mitigation fees, California cities and counties should also comply with applicable requirements of the Mitigation Fee Act.[54]

Comment [CDA82]: Beyond just the mention, please elaborate to provide guidance about how this specifically relates to coastal planning and the Coastal Act.

Navigating the balance between coastal resource protection and private property rights will require careful consideration of relevant precedent, nexus and rough proportionality, background principles of property law, and distinguishing government takings from takings by the forces of nature.[55] Figure 2 presents a flow chart of some of the criteria to consider when applying a legal framework to determine whether shoreline armoring is a feasible adaption strategy for residential areas.

Takings Analysis Policy

In order to avoid unconstitutional takings of private property, a community can choose to adopt an LCP policy that allows some development in a sea level rise hazard zone where development would normally be prohibited (Policy B.10 Takings Analysis). Such a policy can specify development standards that apply to new development allowed in hazard zones to avoid a taking; for example, it could specify that: (a) the amount, type, and duration of development allowed shall be the minimum necessary to avoid a taking; (b) all impacts to the coastal resources in the sea level rise hazard zone shall be avoided to the maximum extent feasible; and (c) all adverse impacts to the coastal resources in the sea level rise hazard zone shall be fully mitigated. By adopting such a policy, local governments can assess whether applying particular sea level rise adaptation policies in specific circumstances would likely result in a regulatory taking of private property without just compensation and, if so, allow a certain amount of development in order to avoid such a taking.

[53] The California Supreme Court has ruled that courts should be more deferential towards agencies when reviewing fees imposed pursuant to legislatively enacted rules of general applicability than when reviewing fees imposed on an ad hoc basis (see *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854, 881). The rationale is that fees imposed pursuant to rules of general applicability that involve little discretion are less likely to impose disproportionate burdens on property owners than fees determined on an ad hoc basis.

[54] Govt. Code, § 66000 *et seq.*

[55] Michael Allan Wolf, Strategies for Making Sea-Level Rise Adaptation Tools 'Takings-Proof', 28 J. Land Use & Envtl. L. 157 (2013), available at http://scholarship.law.ufl.edu/facultypub/404 (arguing that the Takings Clause of the United States Constitution applies to takings by government actors, not the forces of nature).

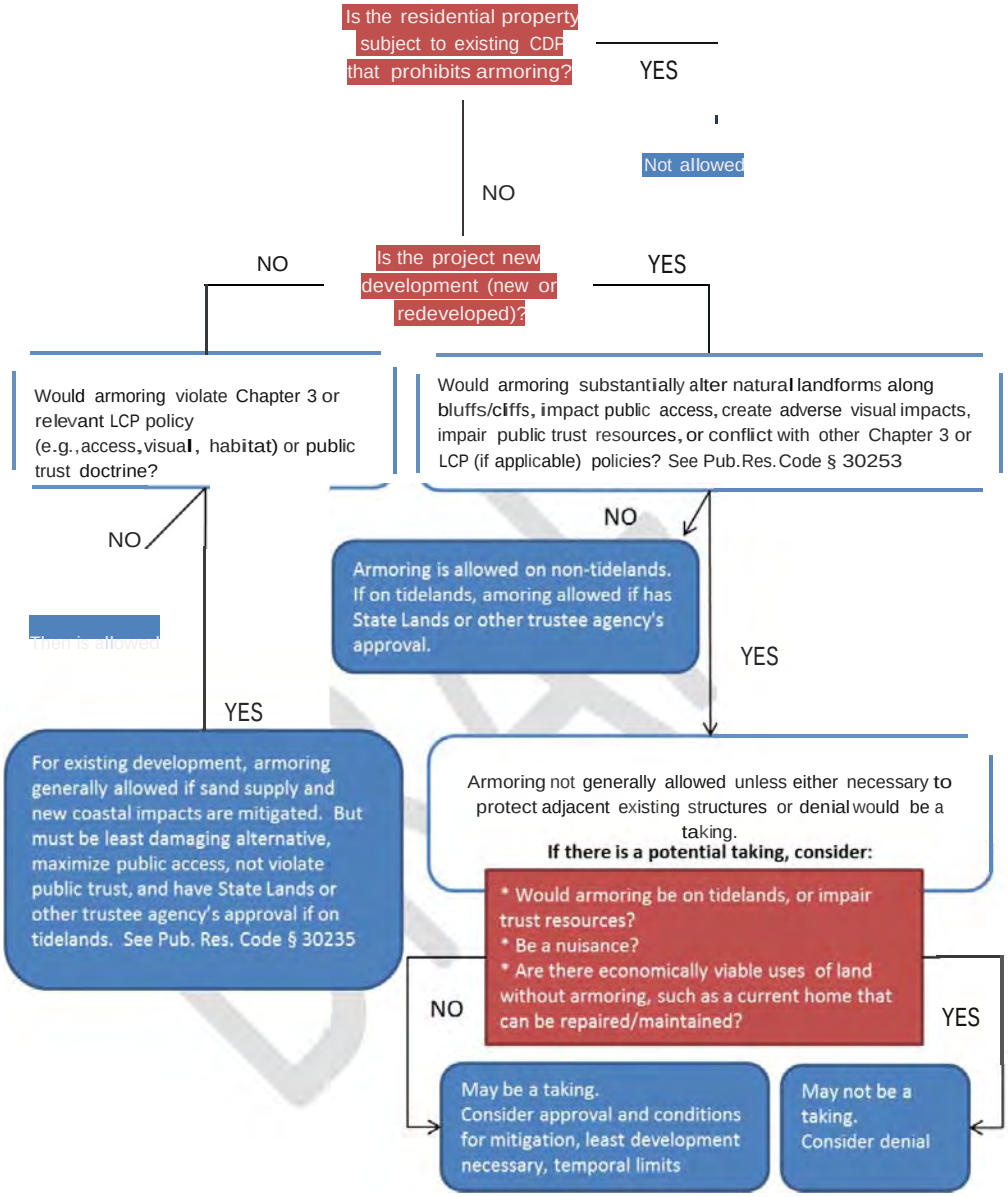


Figure 2. Legal framework for considering shoreline armoring to protect residential structures

5. Implementing Adaptation Strategies

After identifying appropriate adaptation strategies for each planning area, communities can look to the policy compendium in Section 7 for policy language that can help implement those strategies. For protection, look at policies F.1 – F.10. For accommodation, look at policies C.1, E.1– E.2, and E.4. And for retreat, look at policies D.1 – D.3. Community scale adaptation strategies (policies G.1– G.11) include all types of adaptation and hybrid approaches. These various policies fit into different stages of the LCP Planning Steps that culminate in LCP implementation and re-evaluation.

LCP Planning Steps

The steps below from the CCC Sea Level Rise Policy Guidance provide the broadest framework for addressing sea level rise in an LCP. All communities should step through this framework when planning to update their LCPs to address sea level rise.

1. **Determine a range of sea level rise projections relevant to LCP planning area/segment** using best-available science.

2. **Identify potential physical sea level rise impacts in the LCP planning area/segment**, including inundation, storm flooding, wave impacts, erosion, and/or saltwater intrusion into freshwater resources.

3. **Assess potential risks from sea level rise to coastal resources and development in the LCP planning area/segment,** including those resources addressed in Chapter 3 of the Coastal Act.

4. **Identify adaptation measures and LCP policy options** to include in the new or updated LCP, including both general policies and ordinances that apply to all development exposed to sea level rise, and more targeted policies and land use changes to address specific risks in particular portions of the planning area.

5. **Draft updated or new LCP for certification with California Coastal Commission**, including the Land Use Plan and Implementing Ordinances.

6. **Implement the LCP and monitor and re-evaluate strategies as needed** to address new circumstances relevant to the area, including updating policies to address changed circumstances through future LCP amendment.

The model policies presented in Section 7 of the policy guidance provide a suite of options for communities to consider when creating or updating their LCP to address sea level rise. Local governments structure their LCPs (through their Land Use Plans and Implementation Plans) in a variety of ways, with some local governments including significant policy detail in the LUP, and some reserving such detail for the IP. Some of the model policies in the Guidance reflect a more general policy (as most commonly seen in an LUP) and some have more relevance to implementation or zoning policy (more typically seen in an IP). Local governments should customize the model policies to align with their communities' approach and to facilitate timely development of adaptation strategies. Table 3 shows a crosswalk of Residential Adaptation Policies to the steps of the CCC Sea Level Rise Policy Guidance.

Table 3. Crosswalk of policies and LCP planning steps

Step for addressing sea level rise in LCP planning		Applicable residential adaptation policy #	
Step 1	Determine a range of sea level rise projections relevant to LCP planning area/segment using best-available science	A.1 Identifying and Using Best Available Science A.2 Identifying Planning Horizons	
Step 2	Identify potential physical sea level rise impacts in the LCP planning area/segment	A.3 Mapping Coastal Hazards A.4 Site-specific Coastal Hazards Report Required A.5 Coastal Hazards Report Contents	
Step 3	Assess potential risks from sea level rise to coastal resources and development in the LCP planning area/segment	G.1 Management of Sea Level Rise Hazards G.2 Adaptation Plan	
Step 4	Identify adaptation measures and LCP policy options	B.1-4 New Development B.5-6 Setbacks B.7-8 Redevelopment B.9 Land Division C.1 Adaptive Design D.1-3 Managed Retreat E1-4 Moving Hazards away from Development	F.1-10 Shoreline Armoring G.1-2 Developing Adaptation Planning Information G.5-8 Community Scale: Beach and Dune/Bluff/River Adaptation G.10 Transfer of Development Rights
Step 5	Draft updated or new LCP for certification with CCC		
Step 6	Implement the LCP and monitor and re-evaluate strategies as needed	A.3 Mapping Coastal Hazards G.3-4 Sea Level Rise Overlay Zones G.7-9 Trigger-Based Adaptation Approaches G.11 GHADs and CSAs	

Implementing adaptation strategies will be strengthened by tying policies to monitoring and enforcement of permit conditions. Actual policies and permits issued should be clear and identify benchmarks to evaluate implementation, so as to avoid any misunderstandings and to increase compliance.

Adaptation Pathways

A helpful approach for coastal communities to consider when planning for sea level rise involves phasing in short and long term adaptation strategies over time. This concept of adaptation planning pathways provide a structure for sequencing adaptation measures using the time horizon of expected sea level rise impacts. One way to think about this is approach is through integrating LCP Planning Steps 4 and 6 in the framework outlined in Table 3 above.

Many Section 7 model policies facilitate implementation of this approach. For example, distinguishing between short and long-term actions and triggers are inherent in such policies as D.1 Removal Conditions/Development duration; G.5 Beach replenishment; G.7 Repetitive Loss; and G.8 Beach Management Plan. To put this in context, urban and less developed coastal

communities could choose these same policy options (e.g., setbacks) and still follow different pathways based on timing of impacts (e.g., the level of asset vulnerability to increments of sea level rise), designated triggers (e.g., beach width), investment resources (e.g., capital improvement funds), and availability of inland parcels (e.g., for transfer of development rights).

The planning pathway approach for community scale adaptation also provides a way to manage uncertainty in timing and extent of sea level rise impact by incorporating triggering actions in the planning or implementation stages of adaptation strategies. For example, triggers related to the extent of flooding or frequency of damages might be selected to initiate new phases of adaptation (Figure 3). These triggers should be informed by local community involvement, and will reflect a community's risk tolerance, local conditions, and adaptation vision.

Another element of providing for resilient residential adaptation could also be to specify a minimum planning horizon for community services. Some of the model policies reference the temporary loss of community services (utilities, roads, water treatment, etc.) as potentially triggering the next phase of adaptation. A community visioning and adaptation planning process should include discussion of such options for vulnerable areas. Communities should also plan for the potential of higher administration costs for adaptation programs in the future, especially as trigger conditions begin to emerge. Education, outreach, and enforcement activities might be a significant part of these transition times.

While adaptation options are typically designed to last for particular amounts of time, the coastal environment is dynamic and adaptation measures are not guaranteed to work forever. Communities should look for signs that some options have run their course and plan adaptation pathways to transition actions as needed, despite any predicted impact timeframe. Finally, analyzing a worst-case "high" projection for the planning horizon or expected life of the proposed development provides a conservative upper bound for planning pathways based on current information. It is important to note that not all development will be designed to withstand the sea level rise impacts projected in the planning horizon, but analysis of high sea level rise scenarios over the typical anticipated life of development types will help in adaptation planning. In areas subject to future hazards, the life of any particular development will be limited by site conditions. In some cases, it may be appropriate to design for the local hazard conditions that will result from more moderate sea level rise scenarios, as long as decision makers and project applicants plan to implement additional adaptation strategies if conditions change more than anticipated in the initial design. It might also be appropriate to allow some development on constrained parcels where investment backed expectations are appropriately limited by having permit conditions that acknowledge future coastal hazard risks and include plans for future adaptation measures or structure removal.

Comment [CDA83]: The costs of implementing adaptation measures are not addressed in a meaningful way in this document. In many cases adaptation measures are difficult to envision and design, especially "green" adaptations, much less cost out. These challenges will have a significant impact on the timing and effectiveness of local governments ability to deploy responses.

The Draft Policy Guidance should focus more on identifying strategies for addressing immediate to short term impacts of sea level rise that are feasible in light of the limitations on current and future resources available to design and implement adaptation strategies. Marin is using this approach through our local sea level rise planning efforts and LCP amendments rather than more speculative end game requirements that seek to leverage the Coastal Development Permit process by requiring residents to agree to vacate and demolish their homes when proposing minor remodel and replacement projects that fall under the proposed definition of redevelopment.

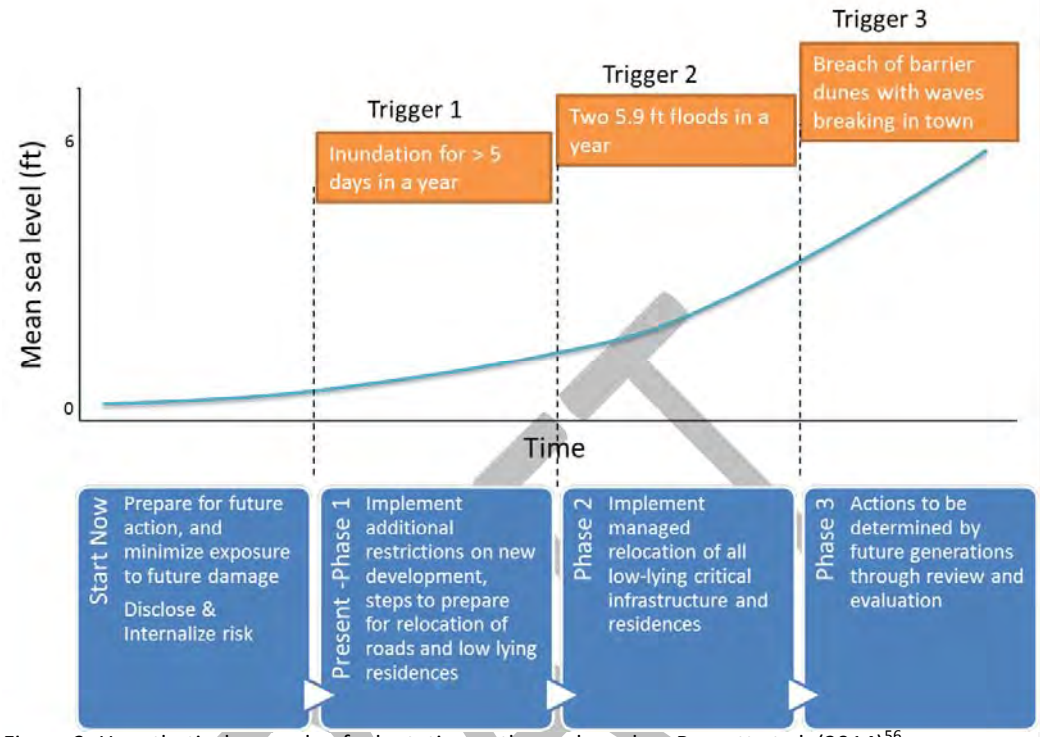


Figure 3. Hypothetical example of adaptation pathway, based on Barnett et al. (2014)[56]

Coordination and alignment with other planning-related processes Many other planning processes, project reviews, and studies require or may include key information relevant to an LCP evaluating and addressing sea level rise risks. Planners should be aware of these potential overlaps and do their best to track the on-going work of state and federal agencies, and make an effort to share information in cases where analyses required for some of these planning activities may overlap with the studies appropriate for sea level rise planning in LCPs. Planners should coordinate regionally where appropriate and possible. Additionally, these agencies, organizations, and planning efforts may be good resources from which to gather information when performing analyses needed for LCP updates.

One of the main areas of overlap with LCP planning is with the required elements of a Local Hazard Mitigation Plan (LHMP), and the Commission recommends coordinating an LHMP update with an LCP update if possible. As part of an LHMP, local governments identify the natural hazards that impact their community, identify actions to reduce the losses from those hazards, and establish a coordinated process to implement the plan. Other opportunities for

[56] Barnett, J., Graham, S., Mortreux, C., Fincher, R., Waters, E., & Hurlimann, A. (2014). A local coastal adaptation pathway. *Nature Climate Change*, *4*(12), 1103.

sharing sea level rise information to inform related planning processes and documents include alignment with National Flood Insurance Program and Community Rating System guidelines in floodplain ordinances, relevant General Plan elements, capital improvement plans, and regional transportation plans.

Comment [CDA84]: It should be noted that the Marin draft LCP is closely aligned with the NFIP/CRS (a strategy we hope will be supported by the CCC in review of the County's LCP hazard policies and standards).

Regarding General Plans, recent legislation (SB 379) requires General Plan Safety Elements to address climate change through a set of goals, policies, and objectives based on a vulnerability assessment. To govern effectively in the coastal zone, a General Plan should be consistent with the local government's LCP, including with respect to climate change impacts such as sea level rise. Some LCPs are combined with the local government's General Plan and Zoning Ordinance documents, and some LCPs are separate documents that work in tandem with the General Plan and Zoning Ordinance. Regardless, when developing or amending a General Plan, local governments should coordinate closely with the California Coastal Commission to assure that general plan provisions intended to apply in the coastal zone are consistent with the governing LCP and California Coastal Act as relevant. This alignment can be achieved through consistency between policies in the LCP and the General Plan, and by aligning the vulnerability assessments now required by SB 379 with the recommendations on sea level rise vulnerability assessments provided in the Sea Level Rise Policy Guidance.

For more examples of coordination and alignment opportunities, refer to the number of similar planning processes, projects, and documents listed in the CCC Sea Level Rise Policy Guidance[57].

6. Case Studies of typology groups and policy issues

The effort to put residential development patterns along California's coast into categories or types affirms the importance of understanding context when developing policy. It also illustrates it may be difficult to generalize how to implement "adaptation" along the shoreline in specific places. This section presents six short case studies of coastal communities that have some portion of their coastal shoreline that fits into the groups determined by the conceptual typology, to explore the implications of diverse contexts for adaptation planning policy issues.

1. URBAN BLUFFTOP: SOLANA BEACH, SAN DIEGO COUNTY

The Solana Beach community is built out along the shoreline, and the beaches below the existing blufftop residential development are highly valuable public access and recreational resources. They are also subject to constant wave attack and long-term erosional trends. The cliffs themselves are high and do not provide stable development sites without reliance on measures such as significant setback distances of development from the bluff edge, substantial foundation development such as deep caissons (subterranean concrete piers), or beach-level seawalls and mid- and upper-bluff retention structures. The primary adaptation challenge in Solana Beach has been how to protect existing blufftop development, and potentially allow redevelopment of existing homes, while not losing the beach below or the aesthetic of the natural cliff form. Much of this development is now protected by seawalls and upper bluff retention structures. Many of the existing blufftop homes have seawalls which prevent natural retreat of the beach and result in loss of beach resources. However, maintaining the existing development pattern will likely lead to

Comment [CDA85]: In the interest of providing helpful information to local governments (as with the other notes below), please explain if the City has beach-level residential development or is the description solely addressing blufftop residential uses?

Comment [CDA86]: Presumably by erosion and failures of the bluff?

[57] See Figure 10 in Coastal Commission's 2015 Sea Level Rise Policy Guidance

long-term loss of beach resources without significant long-term retreat of blufftop development or alternatively, measures such as sand replenishment.

Solana Beach developed a Land Use Plan (LUP) approved by the Coastal Commission in January 2014 to address these and other issues, including requiring the consideration of accelerated sea level rise in conducting slope stability and safe setback analysis for new development. The LUP also lays out specific policies for the redevelopment of existing blufftop residential development.[58] The Implementation Plan portion of the LUP, which would include more specific development standards, has yet to be completed.

In May 2017, the Coastal Commission approved an LCP amendment for the City of Solana Beach to incorporate the results of a recreational fee study focused on mitigating adverse impacts to beach recreation from seawall development.[59] This type of effort is a step toward developing mitigation policies that can be applied to private seawall projects that have adverse impacts on the public recreational values of the beach. The Coastal Commission previously has imposed beach impact fees on shoreline armoring projects to mitigate for the loss of recreational beach values, including using travel-cost and real estate valuation methods to account for the future loss of beach recreation area.[60] While methods for quantifying and incorporating ecological values into beach impact fees have yet to be endorsed by the Coastal Commission and designing fees that adequately compensate for beach losses is a challenge, this area is an active subject of research and requires further work.

Given the current extent of shoreline armoring in Solana Beach, mitigation strategies for shoreline structure development will be critical to effective long-term protection of the beach environment. The Cities of Solana Beach and Encinitas also are hoping to benefit from a federally-sponsored 50-year beach replenishment effort potentially to begin sometime in 2018-19. While beach replenishment may be an attractive option for communities such as Solana Beach, it is important to note that these types of projects are expensive and complex, often requiring Congressional approval of projects carried out by the Army Corps of Engineers. These projects may easily take over 10 years to be authorized and funded. It is also unclear whether the large investment in such projects will actually result in long-term protection of the beach in places like Solana Beach, where the beaches and cliffs are constantly subject to high wave energy, and thus where the results of sand replenishment may be short-lived.[61] Additionally, beach replenishment projects can introduce impacts to ecological systems and surfing resources; as such, these projects require careful analysis and planning.

Comment [CDA87]: Does it apply only to new seawalls, or to repair of seawalls, or to owners who have existing seawalls but do not anticipate coastal permits?

Comment [CDA88]: Is there evidence that these actually resulted in replenishment or protection of the beach, and if so, how much? As noted in the following paragraph, the document questions whether a "federally-sponsored 50-year beach replenishment effort…will actually result in long-term protection of the beach in places like Solana Beach, where the beaches and cliffs are constantly subject to high wave energy, and thus where the results of sand replenishment may be short-lived." So can we learn from this case study which, if any, is the more viable strategy: the city of Solana Beach's recreational fee, the Commission's beach impact fees, or the federal nourishment project?

[58] CITY OF SOLANA BEACH, SOLANA BEACH LAND USE PLAN (2014), http://solana-beach.hdso.net/LCPLUP/LCPLUP-COMPLETE.pdf. CCC, Adopted Findings for Solana Beach Land Use Plan, June 14, 2012.

[59] CCC, City of Solana Beach LCP Amendment No. LCP-6-SOL-16-0020-1 (Public Recreation Fee), May 11, 2017.

[60] See e.g., CAL. COASTAL COMM'N, ADOPTED FINDINGS FOR COASTAL DEVELOPMENT, PERMIT APPLICATION NO. 2-10-039 (2013), https://documents.coastal.ca.gov/reports/2013/8/Th17a-8-2013.pdf; CAL. COASTAL COMM'N, REVISED FINDINGS FOR COASTAL DEVELOPMENT, PERMIT APPLICATION NO. 3-02-024 (2005), pp 29-39.

[61] Gary Griggs & Nicole Kinsman, Beach widths, cliff slopes, and artificial nourishment along the California Coast, Shore & Beach, Vol. 84, No. 1, Winter 2016.

2. URBAN BEACHFRONT: BROAD BEACH, LOS ANGELES COUNTY[62]

More than 100 homes first constructed in the 1930's and redeveloped over the decades sit along Broad Beach just inland of the ocean. Over the last several decades, Broad Beach has eroded significantly and this has placed the homes, backyards and septic systems in danger. A 0.8 mile-long emergency rock revetment was constructed to protect the homes, resulting in the loss of significant beach area and covering many existing public lateral access dedications previously required by the Coastal Commission and now held by the State Lands Commission. The homeowners formed a Geological Hazard Abatement District (GHAD) to address the shoreline erosion and beach management problem collectively. The GHAD is a type of local assessment district that can enable communities to pool resources to conduct hazards studies and fund adaptation measures. Among other strategies, the Broad Beach GHAD proposes a 20-year beach replenishment program to maintain the beach in front of the revetment, which would be buried under a restored coastal dune complex. Broad Beach is one of the first large scale examples of this GHAD mechanism being used for funding sea level rise adaptation measures.

The Broad Beach project raises significant issues about the long-term impacts of the beach homes and associated revetment on the beach; public access and recreation; and ecological value of the dune and beach complex, which will likely require frequent maintenance. There is considerable uncertainty about how long the GHAD's proposed restoration of public beach seaward of the revetment will last in the face of on-going beach erosion and sea level rise. Concerns also exist about the potential impacts of the proposed sand replenishment on beach and marine habitats, including sensitive offshore habitats in the Point Dume State Marine Conservation Area. Acknowledging the precedential nature and aspirations of the project, adaptive management relying on a series of monitoring thresholds has been proposed to ensure resources are being adequately protected. The Coastal Commission approved the Broad Beach project in October 2015. However, the approval only extends for 10 years so that it can be revisited and revised if necessary, based on a better understanding of the replenishment project performance, including the implications for public access and natural shoreline resources.

Broad Beach is a good example of a testing a hybrid of hard armoring/rock strategy and soft sand replenishment and dune restoration.. The Commission's action also considers the longer-term operation of LCP requirements for redevelopment at Broad Beach, which, similar to the rules for Solana Beach, essentially require redeveloped homes to move inland as far as possible. However, unlike Solana Beach, the Malibu LCP (which applies to portions of the Broad Beach project that are not in the Commission's retained jurisdiction over tidelands) also requires homes to be elevated on concrete piers, which potentially removes the need for placing rock at beach level – an option that is not available in the high cliff setting of Solana Beach. Over time, this may allow for the removal of the revetment as a way to further protect shoreline resources from sea level rise. However, there is considerable uncertainty as to whether conditions will allow for such phased retreat. This uncertainty is one of the reasons that the Commission limited its approval of the beach replenishment and hard armoring approach to 10 years subject to extensive monitoring and reporting requirements.

Comment [CDA89]: This is a good example of why Marin has persisted to obtain certification for the home elevation strategy from the CCC.

3. LOW DENSITY BLUFFTOP: BIG LAGOON, HUMBOLDT COUNTY

[62] This discussion relies on: Addendum from Cal. Coastal Comm'n South Central Coast District Staff, to Cal. Coastal Comm'rs & Interested Pers., Staff Recommendation on Coastal Development Permit No.4-15-0390 (October 7, 2015) (on file with the Cal. Coastal Comm'n).

The Big Lagoon area illustrates how a relatively less dense, more rural development context allows for the use of relocation and planned retreat for both existing and new development. Big Lagoon is in the northern part of Humboldt County, composed of an uplifted marine terrace approximately 40-90 feet above mean sea level. Many of the parcels in the area are used for commercial timber harvesting and rural residences. Bluff erosion and geologic instability currently pose risks to many existing structures located on bluff edges, and sea level rise will increase erosion rates in the future. Sudden catastrophic bluff failure events have already led to emergency relocations of homes along the bluffs between Big Lagoon and Patrick's Point on several occasions, including emergency relocations of dozens of cabins starting in the 1940s and continuing as recently as 2013.[63] Development permits for cabin relocations were issued even before the effective certification of the Humboldt County LCP in 1986. One recent example of planning for retreat and relocation occurred in 2015 when Humboldt County submitted an LCP amendment that would affect a 13-acre lot owned by Big Lagoon Park Company. The amendment of the North Coast Area Plan segment of the Land Use Plan and the Implementation Plan of the Humboldt County LCP reconfigured the boundary lines between existing Residential Estates (RE) and Coastal Commercial Timberland (TC) land use and zoning designations. The zoning change allows managed retreat of 14 existing cabins away from the bluffs.

Comment [CDA90]: Are the cabins individually owned on separate lots? If so will the owners need to purchase lots in the expanded RE zone from other owners? Was the price of those lots perhaps set as a part of this plan?

The proactive planned relocation of development in Big Lagoon was also mirrored in a case of proposed new development in a hazardous blufftop area of Humboldt County. On a location just downcoast of the Big Lagoon cabin development, on the same high eroding bluff formation, the Coastal Commission relied on a "takings override" finding to approve a new house in February 2014 (Winget project).[64] The agency used the best available scientific projections for sea level rise and erosion rates to determine that the proposed house would last about 50 years before it needed to be removed to avoid falling to the beach below. Rather than deny the project entirely, the Commission conditioned it to incorporate adaptive measures that allow for an economic use of the site as long as possible. Before the erosion threat reaches the point of requiring removal, the property owners committed to annual monitoring of the bluff edge and triggers for more thorough geotechnical study as erosion continues to encroach on the development. In this way, the property owners can maximize the amount of time possible to safely stay in their residence.

4. LOW/MEDIUM DENSITY BEACHFRONT: STINSON BEACH, MARIN COUNTY[65]

There is significant residential development along the shoreline of Marin County's Stinson Beach community that is subject to long-term erosion, wave run-up, coastal flooding, septic failure, and water distribution pipe failure. Calle del Arroyo, a principal access road to the Calles, Patios, and Seadrift neighborhoods of Stinson Beach, may also experience increased flooding and eventual permanent inundation, severely limiting access and utility infrastructure to portions of the community. Flooding from Bolinas Lagoon and Easkoot Creek already occurs and will likely worsen with future rising sea levels. Stinson Beach is similar to Broad Beach in terms of the density of homes on the immediate beach front. In general, though, there is relatively more beach area in front of the homes as compared to Broad Beach. In the past Marin County has generally

Comment [CDA91]: This would be clearer and more accurate if written "that in the long term is subject to erosion…"

[63] CALIFORNIA COASTAL COMMISSION, HUMBOLDT COUNTY LCP AMENDMENT LCP-1-HUM-15-0011-2 2 (2015).
[64] CALIFORNIA COASTAL COMMISSION, STAFF REPORT: REGULAR CALENDAR, APPLICATION NO. 1-12-023 24 (2013).
[65] *See generally* CALIFORNIA COASTAL COMMISSION, MARIN COUNTY LOCAL COASTAL PROGRAM AMENDMENT NUMBER LCP-2-MAR-15-0029-1 (MARIN LCP UPDATE) (2016). Note that the Commission has not acted on the hazards policy at the time of the release of this policy guidance.

allowed redevelopment of beach homes if they comply with FEMA flood elevation rules, but this has resulted in some elevated structures that potentially raise concerns about visual resources and community character, as well as beach access and recreation. Thus, similar to some parts of Malibu and elsewhere in the state, over the longer-run there may be a concern that the mean high tide, and thus public trust lands, will migrate to and eventually under elevated homes. This eventuality demonstrates the need to more comprehensively address the potential conflict between coastal hazard mitigation and coastal resource protection, including protection of the public trust interest in tidelands.

Marin is one of the first local communities to go through the process of conducting an extensive climate change vulnerability assessment, beginning work on adaptation planning, and submitting an LCP that attempts to address sea level rise to the Coastal Commission for certification. While accommodation of vulnerable structures, roads and utilities, primarily through elevation and retrofits, is identified by the county as a short-term priority for Stinson Beach, longer term actions remain to be further studied or proposed. For example, the county's vulnerability assessment concludes that the beach area in front of the Seadrift[66] revetment will be mostly lost by 2100. The county is currently recommending a policy of allowing structures to be raised 3 feet above FEMA's Base Flood Elevation to account for future sea level rise. In the future, adaptation options might include major beach replenishment, restrictions on rebuilding structures destroyed by storms, and removal or relocation of structures. The LCP update was heard by the Coastal Commission in November 2016, but action on the coastal hazards section of the update was deferred. The Commission staff recommended approval of the LCP if it was modified to address specific concerns regarding coastal hazards policy and adaptation planning. For example, the staff accepted the County's proposed addition of 3 feet of elevation to new structures in response to sea level rise, but also recommended adding specific triggers for removal of this development in the long run should these projections be exceeded and/or result in the loss of public trust and recreational beach resources. In recognition of the uncertainty of current projections, the Commission staff also recommended a requirement to revisit adaptation measures in 10 years, including the creation of sandy beach management plans to protect the valuable beaches in Marin County.

5. DEVELOPED ESTUARY: NEWPORT BEACH, ORANGE COUNTY

Estuarine environments present a different set of sea level rise policy concerns compared to developed bluffs or beaches. The development of Newport Bay Harbor was authorized in 1934 and carried out by the Army Corps of Engineers. Islands within Newport Bay were built-up using dredged sediments within the estuary and now residences and small piers are common in the bay. Increased erosion, loss of coastal wetlands, permanent or periodic inundation of low-lying areas, increases in coastal flooding, and salt water intrusion are all expected sea level rise impacts facing Newport Beach. Structures on islands within Newport Bay and the bayside of Balboa Peninsula typically rely on bulkheads (retaining wall structures similar to seawalls but typically not designed for wave impacts) to ensure protection against coastal flooding and shoreline retreat. Most immediate sea level rise adaptation measures in Newport Bay will be to reinforce and

Comment [CDA92]: Does this refer to homes on the beach itself? If so, it may be addressing a home that is more the exception than the rule. At the end of document we provide images of the "spider house" raised beachfront home. Under the Marin County's proposed LCP Amendments, the height of these homes would have been lower by 7 feet as shown

Comment [CDA93]: More specifically, what is the beach access and recreation issue here? Many of the streets in Stinson Beach terminate by opening up directly onto the beach providing for direct access. In other areas where dunes separate the existing development from the beach, there are lateral trails to a beach that is as noted much broader and open than Broad Beach. It's unclear how raising a home, in place, along these streets would limit beach access and recreation.

Comment [CDA94]: Please note the proposed policy *requires* compliance with FEMA BFE in addition to 3 feet

[66] Property in the Seadrift subdivision is subject to a settlement agreement that governs allowable development in that area; planning for that area therefore has unique constraints because it will need to be consistent with the terms of that agreement.

elevate those existing bulkheads. However, protection of the public tidelands seaward of the bulkheads for public use is a primary concern and must be addressed on a comprehensive basis.

The Coastal Commission approved an Implementation Plan (IP) submitted by the City of Newport Beach in September 2016.[67] As approved the IP adds requirements to the LCP that sea level rise be addressed in Coastal Hazards Reports and Geologic Stability Reports for new development applications, and that shoreline management plans be created for existing development. These management plans must include evaluation of adaptation options exploring the feasibility of hazard avoidance, beach replenishment, and planned retreat. The City also requires property owners to record a waiver of future shoreline armoring for new development. In the case of bulkheads, applicants must waive rights to future protection, including repair or maintenance, enhancement, or any activity affecting the bulkhead, that results in any encroachment seaward of the authorized footprint when public lands (tidelands or sandy beach area) are present seaward of the existing bulkhead. In this way, redevelopment of the existing pattern of bulkhead-reliant areas includes measures that allow for landward relocation of new development and bulkheads in the future, not unlike the redevelopment standards for Solana
Beach.

6. LOW DENSITY ESTUARY: BODEGA BAY, SONOMA COUNTY

The Sonoma County coast supports agricultural lands, timber preserves, open space areas, recreational lands, and low-density community development. In contrast to Newport Bay, Bodega Harbor is a small shallow natural harbor in Sonoma County, protected from the larger expanse of Bodega Bay to the south by a narrow spit of land. The area has relatively low density residential development, and large expanses of natural habitat, both in tidal mudflats and salt marsh, presenting different policy questions than the highly urbanized context of Newport Bay. For example, in one recent coastal permit application, the Coastal Commission found that there was a policy conflict and applied the conflict resolution provision of the Coastal Act to provide protection of ESHA wetlands in Bodega Bay while allowing redevelopment of the existing Lundberg residence.[68] The residence was moved out of ESHA and special conditions put in place to mitigate the impacts from the development. These conditions included a revised habitat restoration and monitoring plan; restrictions on future development, including a prohibition on development within sensitive habitat areas; and a restriction on future shoreline protective devices.

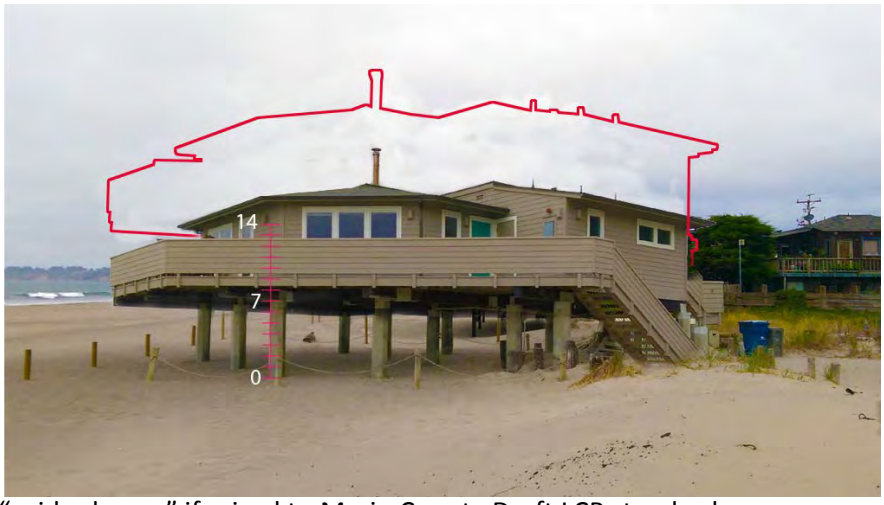
The Lundberg residence relied on design plans that accounted for 55 inches of sea level rise and waves during a 100-year storm. It was also found to be elevated sufficiently to withstand a tsunami wave during its 75 year anticipated life. However, as with the Marin County LCP and the Winget project in Big Lagoon, the inherent uncertainty associated with coastal hazards and sea level rise projections means that the residence might face threats sooner than expected. To mitigate this future risk, the permit contained a requirement to remove the proposed development when the residence is no longer safe to inhabit or is threatened with coastal hazards that would require a response beyond ordinary repair and maintenance.

[67] CALIFORNIA COASTAL COMMISSION, CITY OF NEWPORT BEACH IMPLEMENTATION PLAN LCP-5-NPB-15-0039-1 53 (2016).

[68] CALIFORNIA COASTAL COMMISSION, STAFF REPORT ADDENDUM FOR W16A, CDP APPLICATION NUMBER 2-14-0673 29-36 (2015).

Re # 4. LOW/MEDIUM DENSITY BEACHFRONT: STINSON BEACH, MARIN COUNTY[65]

Stinson “spider house.” Note views to and along the coast.



“spider house” if raised to Marin County Draft LCP standard

Comments on Page 13

CDA-Since the Draft Policy Guidance advocates the current use of soft measures, it would be helpful to local governments to have information about where “living shorelines” have been implemented along the open coast, including beach areas, and, if available, data on their cost vs. performance.

CDA-Under Coastal Act Section 30235, referenced construction must meet the standards of "designed to eliminate or mitigate adverse impacts on local shoreline sand supply" not the "least environmentally damaging feasible" standard. Section 30235 addresses the requirements for the referenced construction in specific terms, taking precedence over more general standards. While local governments often choose to implement the least environmentally damaging alternative, our concern here, in part, is with the Draft Policy Guidance reaching beyond the four corners of the Coastal Act. The Draft Policy Guidance should make clear distinctions between the statutory limits of the Coastal Act and proposed policies that would expand those limits.

CDA-This is precisely the approach Marin County has taken through its proposed LCP amendments, and the support here is appreciated.

CDA-Please clarify if FEMA does currently allow floodproofing for residential structures in lieu of elevating.

CDA-Speculation needs to be tempered by the wise planning principles articulated in numerous places above (e.g. pg.11) that counsel "reserving [actions] until certain triggers are met. … apportion risk over time and allow for the use of adaptation options closer to the time they are needed, rather than building now for the worst case future condition."

Local governments can take these potential longer term impacts into consideration for defining Adaptation pathways and promoting public understanding of the challenges that subsequent generations will need to address

CDA-Local governments should be allowed to establish the reasonable balance between protecting the safety of coastal residents, business owners and visitors and impacts to coastal views.

CDA-Please expand on how this would occur.

CDA- Are there examples of this? Couldn't the habitat still exist?

CDA- Are there case studies and best available science to support this assertion?

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DRAFT RESIDENTIAL ADAPTATION POLICY GUIDANCE
July 2017
Model Policy Language

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7. Model Policy Language

All local governments working on addressing climate change impacts in their coastal zone should analyze the possible effects of sea level rise and evaluate how sea level rise planning strategies could be implemented through their LCPs to protect public access and coastal resources and minimize hazards. Prior sections of this policy guidance present background, legal considerations and adaptation planning information to guide use of the model policies presented in Section 7.

Comment [CDA1]: This introduction should clarify that these model policies are not mandatory, and that when they contain the words "shall," "required." "must," etc., those are in the context of a model which a local government can adopt or modify, but that such phrasing is not necessarily required for LCP certification.

Comment [CDA2]: It should again be made clear here that these model policies are merely one way LCPs could be changed, that they are not mandatory, and that they could be appropriate in future timeframes, not necessarily in near term LCP Amendments.

A. UNDERSTANDING SEA LEVEL RISE HAZARDS

Note: Policies to define best available science, anticipated duration of development types, coastal hazard zones, and technical studies required in given contexts all provide ways to inform risk assessments and plan for the future effects of sea level rise and coastal hazards. Assumption of risk policies and real estate disclosures provide important mechanisms for educating property owners about hazards and their options for addressing them in the future.

Best Available Science

A.1 Identifying and Using Best Available Science

The best available, up-to-date scientific information about coastal hazards and sea level rise shall be used in vulnerability assessments, the evaluation of coastal development permit applications, and the preparation of technical reports and related findings. Analyses shall include multiple sea level rise scenarios, one of which is a worst-case "high" projection for the planning horizon or expected duration of the proposed development ***[insert the minimum anticipated duration of development, e.g.*,(minimum 100 years unless otherwise specified)]**, based on best available scientific estimates of expected sea level rise at the time of the analysis. Sources of information may include, but shall not be limited to, state and federal agencies, research and academic institutions, and non-governmental organizations, such as the California Coastal Commission (CCC), Ocean Protection Council (OPC), National Oceanic and Atmospheric Administration (NOAA), the National Research Council, and the Intergovernmental Panel on Climate Change.

As of [***insert date***], the best available science is [***insert reference***]. However, best available science shall be updated, in keeping with regional policy efforts, as new, peer-reviewed studies on sea level rise become available and as agencies such as the OPC or the CCC issue updates to their guidance. Vulnerability assessments and related mapping shall be updated at least every ten years, or as necessary to address significant changes in sea level rise estimates.

A.2 Identifying Planning Horizons

The appropriate time horizon to use to evaluate sea level rise depends on the anticipated duration of development, after which such development is expected to be removed, replaced or redeveloped. For example, if a new structure has an anticipated duration of 75 years, then the hazards analysis will evaluate the site over 75 years, including evaluating the range of projected sea level rise over that time period. Using that evaluation, the structure would be set back or designed to avoid hazards over the planning horizon, if possible. However, in areas subject to future hazards, the life of any particular development will be limited by site conditions and may be less than the duration anticipated at time of construction. The anticipated life of development in the coastal zone is not an entitlement to maintain development in hazardous areas, but should

be used for sea level rise planning purposes, and is generally defined by the following timeframes, unless a site or project specific analysis determines otherwise:

a. Ancillary development or amenity structures (e.g. trails, bike racks, playgrounds, parking lots, shoreline restrooms): 5-25 years
b. Residential or commercial structures: 75-100 years
c. Critical infrastructure: 100-150 years

A.3 Mapping Coastal Hazards

Note: Local governments may consider using LCP coastal hazard maps for the evaluation of CDP applications, in-lieu of site-specific coastal hazard reports, if the CDP includes requirements to minimize impacts and address the potential for future hazards to the site, including requirements that property owners accept the risk of developing in a hazardous location (A.6–Assumption of Risk), and agree to remove development subject to appropriate future triggers (D.1–Removal Conditions). In other words, if the overall program includes clear parameters that prevent new hard armoring and phases structure relocation or removal, subject to identified criteria, reliance on a broader scale hazard map might be appropriate. Site specific factors might also preclude the use of regional maps in some cases, so the purpose of the maps and local constraints are important considerations as well.

The [***insert name of City or County***] shall map areas subject to existing and future coastal hazards that will be exacerbated by sea level rise and that present risks to life and property. These areas require additional review and regulation to minimize risks and protect coastal resources.

a. Coastal Hazard maps shall be developed that show areas of the [***City or County]*** that are subject to current or future coastal hazards. The maximum anticipated extent of potential coastal hazards (based on a worst-case "high" projection of sea level rise, using best available science) shall be considered. Coastal hazard areas include, but are not limited to the following:

- Coastal bluff erosion areas
- Beach erosion hazards areas
- Storm flood extent areas (estuarine or riverine related)
- Wave run up: Areas subject to direct wave attack and damage from wave runup
- Tidal inundation: Areas where routine inundation from tides occurs now and where inundation is likely to occur in the future with sea level rise
- Groundwater Inundation: Current and future areas subject to hazards caused by the uprising of groundwater and/or reduced or inadequate drainage

b. Development proposed in potential hazard areas, including those mapped as hazardous [***insert reference to Coastal Hazard maps referenced above***, ***e.g. in Figure X***], shall be evaluated for potential coastal hazards at the site, based on all readily available information and the best available science. If the initial evaluation determines that the proposed development may be subject to coastal hazards over its anticipated duration, a site-specific Coastal Hazard Report is required, the purpose of which is to ensure that such development can be built in a manner consistent with applicable Local Coastal Program coastal hazards policies (see Policies A.4 – Site-specific Coastal Hazard Report Required, and A.5 – Coastal Hazard Report Contents).

Comment [CDA3]: Due to their critical importance to coastal management and regulation, please provide the methodology and analysis used to determine the "anticipated duration" of residential development along the California coast, including data showing the full range, and median value of ages of the structures reviewed to determine "anticipated life."

Comment [CDA4]: The validity of coastal hazard maps are matters of science and fact. The standard for determining whether a local government can use LCP coastal Hazard maps" *in-lieu of site-specific coastal hazard reports"* must be based on the extent to which the maps represent best available science, and should not be made contingent upon a local government's compliance with the requirements listed here, for example requiring property owners to "*agree to remove development subject to appropriate future triggers,"*. This note should be revised to clarify that withholding use of LCP coastal hazard maps, when the maps are adequate to make decisions on permit requests, as a means of leveraging local government and property owner acceptance of certain policies is not the intent. If you read this statement in the converse, would it mean that CDP conditions requiring property owners to abandon and demolish their homes will not be required if a site-specific analysis is submitted? Logically, this note doesn't make sense.

Comment [CDA5]: This statement is ambiguous and incomplete, and hence does not provide useful guidance. It should be clarified that the worst case "high" projection should be provided for informational purposes, and to set the context for adaptation pathways and long range planning to be carried out through future adaptive management strategies. To avoid confusion, this section should reiterate the guidance in section 3 that "*policies apportion risk over time and allow for the use of adaptation options closer to the time they are needed, rather than building now for the worst case future condition."*

Comment [CDA6]: Please clarify the phrase s "Groundwater Inundation' and "uprising of groundwater" in terms of the physical processes these phrases are intended to describe.

As evidenced by the restricted geographic scope and slow pace of implementation of California's Sustainable Groundwater Management Act, assessing potential groundwater impacts is an expensive and challenging proposition. Since the purpose of this guidance is to assist applicants and local governments in addressing the Coastal Act, will the CCC work with appropriate state agencies to provide useful information about groundwater and sea level rise? ... [1]

Comment [CDA7]: Again, consistent with the Guidance framework, delete the word "required." Just as significantly, as written here, the determination that a "development may be subject to coastal hazards" automatically triggers a site-specific Hazards report. This determination should make reference to the qualifier in the next section that states that if issues are sufficiently addressed in an area-wide hazards evaluation , an individual report need not be required.

c. The [***City or County]*** shall put property owners on notice if their parcels are subject to current or future coastal hazards on the Coastal Hazard maps.

d. Coastal Hazard maps shall be updated periodically as new science and modeling results and/or state guidance become available. This update shall occur every 10 years at minimum, or more frequently as necessary, through an LCP amendment.

Comment [CDA8]: Does this refer to applicants for development or all potentially affected property owners?

Comment [CDA9]: Who determines "as necessary?" What are the criteria for necessity? Has the State of California committed to a schedule of update of best available science?

Site-specific Coastal Hazard Studies

Note: Site specific studies are necessary unless hazards are identified on LCP hazard maps at a level of detail adequate to ensure LCP policies and development standards can be complied with. These site specific hazard study policies (A.4 and A.5) are intended to apply to residential development and to be used together in an LCP.

Comment [CDA10]: This is unclear. Does this mean the criteria are required to be included in an LCP, or is the reference actually to a Coastal Permit rather than an LCP?

A.4 Site-specific Coastal Hazard Report Required

All development in areas potentially subject to coastal hazards shall be evaluated by reports that are prepared by a licensed civil engineer with expertise in coastal engineering and geomorphology or other suitably qualified professional. These reports shall be based on the best available science, shall consider the impacts from the high projection of sea level rise for the anticipated duration of the proposed development, shall demonstrate that the development will avoid or minimize impacts from coastal hazards, and shall evaluate the effect of the development over time on coastal resources (including in terms of impacts on public access, shoreline dynamics, natural landforms, natural shoreline processes, and public views) as project impacts continue and/or change over time, including in response to sea level rise.

A.5 Coastal Hazard Report Contents

Note: Local governments should customize the policy addressing the scope and analysis required for the Coastal Hazard Report in a manner compatible with building code requirements and other applicable zoning and LCP policies and regulations.

Coastal Hazard Reports required pursuant to Policy A.4 (Site-specific Coastal Hazard Report Required) shall include analysis of the physical impacts from coastal hazards and sea level rise that might constrain the project site and/or impact the proposed development. Reports should address and demonstrate the site hazards and effects of the proposed development on coastal resources, including discussion, maps, profiles and/or other relevant information that describe the following:

Comment [CDA11]: Revise- this Guidance is advisory

a. Current conditions at the site, including the current:
   - tidal range, referenced to an identified vertical datum
   - intertidal zone
   - inland extent of flooding and wave run-up associated with extreme tidal conditions and storm events
   - beach erosion rates, both long-term and seasonal variability
   - bluff erosion rates, both long-term and episodic

Comment [CDA12]: Establishing these are generally outside the capabilities of most local governments. Is it possible the Coastal Commission could work with the State Lands Commission, the California Coastal Sediment Management Workgroup, and other responsible agencies, including academic institutions, to provide such information as part of the Guidance?

b. Projected future conditions at the site, accounting for sea level rise over the anticipated duration of the development, including the future:
   - Shoreline, dune, or bluff edge, accounting for long-term erosion and assuming an increase in erosion from sea level rise
   - intertidal zone

Comment [CDA13]: See note above. But such information can best be determined by monitoring programs over a suitable timeframe. Can the Commission assist in recruiting state agencies to help, especially for the portion within the State Public Trust? Additionally some of the federal coastal management funds should be allocated to this purpose.

- inland extent of flooding and wave run-up associated with both storm and non-storm conditions

c. Safety of the proposed structure to current and projected future hazards, including:
   - Identification of a safe building envelope on the site that avoids hazards
   - Identification of options to minimize hazards if no safe building envelope exists that would allow avoidance of hazards
   - Analysis of the adequacy of the proposed building/foundation design to ensure stability of the development relative to expected wave run-up, flooding and groundwater inundation for the anticipated duration of the development in both storm and non-storm conditions
   - Description of any proposed future sea level rise adaptation measures, such as incremental removal or relocation when threatened by coastal hazards

d. Discussion of the study and assumptions used in the analysis including a description of the calculations used to determine long-term erosion impacts and the elevation and inland extent of current and future flooding and wave runup.

e. For blufftop development, the report shall include a detailed analysis of erosion risks, including the following:
   - To examine risks from erosion, the predicted bluff edge, shoreline position, or dune profile shall be evaluated considering not only historical retreat, but also acceleration of retreat due to continued and accelerated sea level rise and other climatic impacts. Future long-term erosion rates should be based upon the best available information, using resources such as the highest historic retreat rates, sea level rise model flood projections, or shoreline/bluff/dune change models that take rising sea levels into account. Additionally, proposals for blufftop development shall include a quantitative slope stability analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) and 1.1 (pseudostatic, k=0.15 or determined through a quantitative slope stability analysis by a geotechnical engineer), whereby safety and stability must be demonstrated for the predicted position of the bluff and bluff edge following bluff recession over the identified project life, without the need for caissons or other protective devices. The analysis should consider impacts both with and without any existing shoreline protective devices.

f. For development on a beach, dune, low bluff, or other shoreline property subject to coastal flooding, inundation or erosion, the report shall include a detailed wave uprush and impact report and analysis, including the following:
   - The analysis shall consider current flood hazards as well as flood hazards associated with sea level rise over the anticipated duration of the development. To examine risks and impacts from flooding, including daily tidal inundation, wave impacts, runup, and overtopping, the site should be examined under conditions of a beach subject to long-term erosion and seasonally eroded shoreline combined with a large storm event (1% probability of occurrence). Flood risks should take into account daily and annual high tide conditions, backwater flooding, water level rise due to El Niño and other atmospheric forcing, groundwater inundation, storm surge, sea level rise appropriate for the time period, and waves associated with a large storm event (such as the 100 year storm or greater). The analysis should consider impacts both

Comment [CDA14]: Generally in most dense to medium dense areas the parcels are of a size such that one part of the site will likely be as hazardous as another with regard to sea level rise,

Comment [CDA15]: Please define "groundwater Inundation." Does it mean displacement of fresh water in groundwater aquifers with sea water or something else? What mechanism would affect the stability of development?

Comment [CDA16]: Will referencing the extensive analysis carried out in FEMA NFIP studies be sufficient?

Comment [CDA17]: These are factors in the new FEMA NFIP maps. They should suffice.

Comment [CDA18]: How will these estimates be developed? Does CCC staff have examples of such studies completed, and the costs associated with them?

Comment [CDA19]: When the CoSMoS 3.0 models incorporating geomorphological change become available, will these be accepted for this purpose?

Comment [CDA20]: Does the Commission accept the FEMA science in this regard?

with and without any existing shoreline protective devices.

A range of sea level rise scenarios shall be examined to understand the range of potential impacts that may occur throughout the anticipated duration of the development. At a minimum, flood risk from the highest projected sea level rise over the anticipated duration of the development, based on the current best available science, should be examined. Additionally, the analysis should consider the frequency of future flooding impacts (e.g., daily impacts versus flooding from extreme storms only) and describe the extent to which the proposed development would be able to avoid, minimize, and/or withstand impacts from such occurrences of flooding. Studies should describe adaptation strategies that reduce hazard risks and neither create nor add to impacts on existing coastal resources and that could be incorporated into the development.

Assumption of Risk

Note: A key component of an assumption of risk policy to address sea level rise hinges on property owners acknowledging that shoreline protective devices are not allowed in the future to protect the residential development, and accepting the responsibility to remove or relocate structures and restore the site if it becomes unsafe, it is no longer located on private property, or removal is required pursuant to adaptation planning requirements.

A.6 Assumption of Risk, Waiver of Liability and Indemnity

As a condition of coastal permit approval for new development in an area subject to current or future hazards, applicants shall be required to record a deed restriction on the property to acknowledge and agree [***modify following list as necessary to address specific case***]: 1) that the development is located in a hazardous area, or an area that may become hazardous in the future; 2) to assume the risks of injury and damage from such hazards in connection with the permitted development; 3) to unconditionally waive any claim of damage or liability against the ***[insert local government name, and Coastal Commission, if permit is appealed]***, its officers, agents, and employees for injury or damage from such hazards; 4) to indemnify and hold harmless the ***[insert local government name, and Coastal Commission, if permit is appealed]***, its officers, agents, and employees with respect to approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; 5) to waive rights to shoreline armoring in the future; 6) that public funds may not be available in the future to repair or continue to provide services to the site (e.g., maintenance of roadways or utilities); 7) that the occupancy of structures where sewage disposal or water systems are rendered inoperable may be prohibited; 8) that the structure may eventually be located on public trust lands; and 9) that the structure may be required to be removed or relocated and the site restored if it becomes unsafe, it is no longer located on private property, or removal is required pursuant to adaptation planning requirements.

Real Estate Disclosure

Note: A local government has the authority to require real estate disclosures related to coastal hazards for all applicable properties within their jurisdiction. Such disclosures can be required when property is transferred, regardless of whether it is subject to CDP authorization.

Comment [CDA21]: This statement should be revised to more precisely reflect the applicability of existing development to Coastal Act section 30235. Please correct by replacing "property owners" with "coastal permit applicants"

Comment [CDA22]: Does this mean the property owner is bound to forego state or federal disaster assistance and funding other than that contractually obligated through flood insurance?

Comment [CDA23]: Elevation to BFE+ SLR freeboard is not defined as "armoring"

Comment [CDA24]: This is a determination that belongs to the State Lands Commission.

Comment [CDA25]: This is ambiguous. Does "no longer on private property" refer to a government purchase, or subject to the public trust, in which the property is still private, but encumbered? What "adaptation planning requirements" would require removal -wouldn't those instead be LCP regulations? The guidance on the Waiver should be more specific. clarified to be made specific in the Waiver.

Comment [CDA26]: It would be helpful to provide the relevant Code, Case Law or other legal citation since the real estate industry has a tendency to push back on some types of disclosures that may inhibit sales transactions.
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A.7 Real Estate Disclosure of Hazards

The ***[City or County]*** shall require real estate disclosures of all coastal hazards, including hazards associated with anticipated sea level rise, geologic hazards, and erosion. Disclosure documents related to any future marketing and sale of property subject to coastal hazards (including hazards associated with anticipatory sea level rise scenarios, geologic hazards, groundwater inundation, coastal bluff retreat, coastal flooding, or shoreline erosion, including any hazards identified in ***[City or County]*** hazards maps, vulnerability assessments, or any site-specific hazard analyses of sea level rise), including but not limited to specific marketing materials, sales contracts and similar documents, shall notify buyers of the coastal hazards exposure and the terms and conditions of any coastal development permits. Disclosure should include information about any development restrictions and site exposure to coastal hazards including, but not limited to, episodic and long-term shoreline retreat and coastal erosion, landslide, seismic hazards, and geologic instability, and other potential hazards exacerbated by future sea level rise.

Comment [CDA27]: Is this duplicative of what Real estate brokers are already required to do? Is there unnecessary overlap here, and if so, is intent to duplicate normal due diligence for good measure?

B. AVOID SITING NEW DEVELOPMENT AND/OR PERPETUATING REDEVELOPMENT IN HAZARD AREAS

Note: The policies in Section B are meant to be used together to provide guidance for new development on vacant parcels as well as redevelopment in areas with existing residential patterns. The intent of these policies is to site and design to protect coastal resources and minimize risks to life and property to the maximum extent feasible using setbacks, redevelopment, nonconforming structure, and land division restrictions in areas threatened by sea level rise. Understanding the more complex redevelopment and takings concerns for some communities, new policies for removal plans and reliance on shoreline protection will be important for proactive sea level rise planning.

Comment [CDA28]: Delete "Revelopment" as used here or clarify as an optional tool if local governments choose to implement. It appears nowhere in the Coastal Act or its Administrative Regulations and yet appears to be elevated to the same status as "development"

B.1 Siting to Protect Coastal Resources and Minimize Hazards

a) Non-specific:

New development shall be sited to avoid hazards, taking into account predicted sea level rise hazards, including groundwater changes, over the anticipated life of the development. If hazards cannot be completely avoided, then development shall be sited and designed to protect coastal resources and minimize risks to life and property to the maximum extent feasible. New development shall assure stability and structural integrity of the development, and not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.

b) Shoreline-specific:

Siting and design of new development on or near the shoreline shall take into account coastal hazards and the extent of shoreline migration and groundwater changes that can be anticipated over the expected duration of the development. This landward migration shall be determined based upon historical erosion rates, acceleration of erosion and flooding due to continued and accelerated sea level rise, storm damage, and foreseeable changes in sand supply. Development shall be set back a sufficient distance to prevent impacts to coastal resources, minimize coastal hazards over the anticipated life of the development, assure stability and structural integrity of the development, and not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. If development cannot be set back sufficiently to avoid all risk during its anticipated life, due to lot size, configuration or other

Comment [CDA29]: How will this be determined, and by whom? Existing available models delineate inundation , but only provide rough indications of the shoreline. Is the intent to rely upon project-specific studies submitted by permit applicants?

Comment [CDA30]: This is inconsistent with the Coastal Act sec. 30253 standard of "Minimize risk"

factors, it shall be located as far landward as possible and sited and designed to protect coastal resources and minimize hazards to the extent feasible (See also Policy E.4 – Flood Hazard Mitigation). In addition, when permitted, all development shall be subject to removal plan conditions in Policy B.2 – Removal Plan Conditions for New Development in Hazardous Areas.

Comment [CDA31]: See comments in B-2, D-1

c) Blufftop-specific:

New development shall be set back a sufficient distance to ensure its structural integrity for the anticipated duration of the development, taking into account sea level rise, erosion, and other geologic hazards, without reliance on shoreline protective devices, including any existing shoreline protective devices associated with the site, pursuant to Policy B.5 – Determining Bluff Setback Line. Site-specific coastal hazard studies shall include a quantitative slope stability analysis demonstrating safety and stability for the predicted position of the bluff following bluff recession for the anticipated duration of the development under historical bluff retreat conditions, as well as with acceleration of bluff retreat due to continued and accelerated sea level rise and other climatic impacts (see Policy B.5 – Determining Bluff Setback Line). If development cannot be set back sufficiently to avoid all risk during its anticipated duration, due to lot size, configuration or other factors, it shall be located as far landward as possible and sited and designed to protect coastal resources and minimize hazards to the extent feasible. In addition, when permitted, all development shall be subject to removal plan conditions in Policy B.2 – Removal Plan Conditions for New Development in Hazardous Areas.

Comment [CDA32]: See comments in B-2, D-1

d) Dune-specific:

Siting and design of new development adjacent to dunes shall take into account the extent of landward migration of the foredunes that can be anticipated over the anticipated duration of the development. This landward migration shall be determined based upon historic dune erosion, storm damage, anticipated sea level rise, and foreseeable changes in sand supply. Development shall be set back a sufficient distance to prevent impacts to coastal resources, assure structural stability of the development, and avoid coastal hazards over the expected duration of the development. If development cannot be set back sufficiently to avoid hazards during its anticipated duration, due to lot size, configuration or other factors, it shall be set back as much as possible and sited and designed to protect coastal resources and minimize hazards to the extent feasible (See also Policy E.4 – Flood Hazard Mitigation). When permitted, development shall be subject to removal plan conditions in Policy B.2 – Removal Plan Conditions for New Development in Hazardous Areas.

Comment [CDA33]: See comments in B-2, D-1

B.2 Removal Plan Conditions for New Development in Hazardous Areas

Require preparation of a Removal and Restoration Plan as a condition of approval for development subject to coastal hazards, to ensure that should the development meet any of the removal criteria in Policy D.1 – Removal Conditions/Development Duration, it will be the property owner's responsibility to remove the structure and restore the site in a way that best protects coastal resources. The plan shall specify that in the event that portions of the development fall to the bluffs or ocean before they are removed/relocated, the landowner will remove all recoverable debris associated with the development from the bluffs and ocean and lawfully dispose of the material in an approved disposal site. The plan shall also specify that such removal requires a coastal development permit.

Comment [CDA34]: CDA has previously raised concerns about the unworkability of requiring a bond to secure removal. No mention of a bond here; is intent to include as condition of CDP? What mechanism can the Guidance suggest to fund and enforce such a Plan?

B.3 Reliance on Shoreline Armoring

All new development, including redevelopment (as defined in Policy B.7), shall be sited and designed to ensure that it does not require shoreline protective devices that substantially alter natural landforms to provide engineering geologic stability and that it will be safe from erosion, flooding, and wave run-up for the anticipated duration of the development. This is true even if new development, including redevelopment, is protected by a legally authorized shoreline protective device, in which case the new development and redevelopment on the site shall still be designed and sited in a manner that does not require or rely on the use of a shoreline protective device to ensure geologic stability. Any existing shoreline armoring structure associated with the new development shall be removed if it is no longer necessary to protect the development, and it is not needed to protect adjacent development that is still entitled to retain shoreline armoring.

Comment [CDA35]: Delete here and in all other instances or clarify in some way that "redevelopment" is an optional approach to treating minor remodels as new construction that may or may not be adopted by local governments.

Comment [CDA36]: If there is an existing SPD, wouldn't that indicate it was needed to ensure geologic stability in the first place? What is the result the guidance intends to create here, and how is that consistent with Sec.30235?

B.4 Bluff Face Development

Structures, grading, and landform alteration on bluff faces are prohibited, except for the following: public access structures where no feasible alternative means of public access exists or shoreline protective devices if otherwise allowed by the LCP. Such structures shall be designed and constructed to be visually compatible with the surrounding area to the maximum extent feasible and to minimize effects on erosion of the bluff face.

B.5 Determining Bluff Setback Line

The bluff or geologic setback line is the location on the bluff top inland of which stability can be reasonably assured for the anticipated duration of the development without need for shoreline protective devices. The setback line shall account for the amount of erosion anticipated over the life of the development, plus an additional setback to ensure slope stability under future conditions. To determine and document the setback line, applications for bluff property development must include a geotechnical report from a licensed Geotechnical Engineer or a certified Engineering Geologist that establishes the bluff or geologic setback line for the proposed development. The analysis shall include a quantitative slope stability analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) or 1.1 (pseudostatic, k-0.15 or determined through analysis by the geotechnical engineer), using shear strength parameters derived from relatively undeformed samples collected at the site. Future long-term erosion rates shall be based upon the best available information on bluff failure mechanisms, using resources such as the highest historic retreat rates, sea level rise flood projections, shoreline change models that take rising sea levels into account, future increase in storm, El Niño or other climatic events, and any known site-specific conditions. The analysis shall assume that any current shoreline protective device does not exist, such that the site would erode in a manner similar to unarmored sites in the same vicinity.

B.6 Minor Development in Hazardous Areas

Minor and/or ancillary development, including ***[insert relevant development types based on existing pattern of development and consistent with view protection policies, e.g., public trails, benches, gazebos, patios, etc.]***, may be located seaward of the bluff or shoreline setback line, but no closer than [***insert appropriate distance***] inland of the bluff edge, provided that development is removed or relocated when threatened. In the event that portions of the development fall to the bluffs or ocean before they are removed/relocated, the landowner will remove all recoverable debris associated with the development from the bluffs and ocean and lawfully dispose of the material in an approved disposal site.

Improvements, Alterations and Additions to Existing Structures

Note: Improvements and alterations that result in replacement of 50% or more of the existing structures shall be considered a replacement structure and treated as new development/redevelopment. All additions must conform with all applicable LCP policies, but an addition that results in redevelopment shall require the whole structure to be brought into conformance with the LCP. Redevelopment is intended to capture alterations related to structural components OR market value. For example, in cases where development might be less than the 50% threshold for redevelopment, it might still be considered redevelopment if an increase in economic value exceeding 50% of market value results from the activity.

B.7 Redevelopment

A development proposal reaches the threshold of being a replacement structure or redevelopment if it meets criteria A or B below. Development meeting this definition must be brought into conformance with all applicable LCP policies.

A. Development that consists of alterations including (1) additions to an existing structure, (2) exterior and/or interior renovations, and/or (3) demolition or replacement of an existing home or other principal structure, or portions thereof, which results in:
   (1) Alteration (including demolition, renovation or replacement) of 50% or more of major structural components including exterior walls, floor, roof structure or foundation, or a 50% increase in gross floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of the LUP (or subject amendment) certification.

   (2) Alteration (including demolition, renovation or replacement) of less than 50% of a major structural component where the proposed alteration would result in cumulative alterations exceeding 50% or more of a major structural component, taking into consideration previous alterations approved on or after the date of this LUP (or subject amendment) certification; or an alteration that constitutes less than 50% increase in floor area where the proposed alteration would result in a cumulative addition of 50% or greater of the floor area, taking into consideration previous additions approved on or after the date of this LUP (or subject amendment) certification.

OR

B. Development that consists of any alteration of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction, based on the documented construction bid costs and either an appraisal by a professional property appraiser or County assessor data, if it is based on current market values.

B.8 Nonconforming Structures

When proposed development would involve redevelopment of an existing structure that is legally non-conforming due to a coastal resource protection standard, the entire structure must be made to conform with all current development standards and applicable policies of the LCP. Improvements to existing non-conforming structures, regardless if the proposed improvements meet the threshold of redevelopment, shall not be permitted when 1) improvements to existing structures increase the degree of non-conformity and/or the hazardous condition by developing

Comment [CDA37]: This is a unreasonable requirement considering how low the threshold is set by the "redevelopment" definition. For example, a 30-year old residence is in need of partial subfloor replacement due to dry rot (slightly over 50% triggering "redevelopment"). Because it's located within an ESHA buffer, would the owner be required to move the entire home to achieve compliance with ESHA policies?

Comment [CDA38]: Is the intent here to supersede Categorical Exclusion Orders (for Marin Order E-82-6) and Coastal Act exemptions indicated below? Important to be clear on this point and to maintain existing Cat Ex Orders and Coastal Act provisions.
1. Outside of defined areas, § 13250(b)(1) exempts Improvements to existing Single-Family Residences from coastal permit requirements.

2. In other defined areas § 13250(b)(4) exempts residential improvements of 10% or less of floor area and increase of 10% in height.

3. § 13252 exempts the replacement of 50 percent or more of a single family residence not destroyed by natural disaster from coastal permit requirements.

4. Section 30610(g)(1) of the Act itself authorizes the zoning-compliant replacement of any structure, other than a public works facility, destroyed by a disaster without a coastal permit, further providing the increase in floor area, height, or bulk of up to 10%. It defines "disaster" as any situation in which the force or forces which destroyed the structure to be replaced were beyond the control of its owner.

5. Finally, Categorical Exclusion Order E-82-6 excludes from permit requirements over a large area of the Marin Coastal Zone "additions to existing single-family dwellings which would result in an increase of no more than 50% of the floor area of the dwelling before the addition or 1,000 square feet, whichever is less.

In each separate case above, the proposed "Redevelopment" language makes no provision to meet the relevant parts of the Categorical Exclusions, the Act or the Administrative Regulations.

seaward; 2) larger structures are proposed in non-conforming locations; or 3) improvements extend the anticipated duration of the development in a non-conforming location.

Land Division

B.9 Restrict Land Division in Hazardous Areas

Limit land divisions, including lot line adjustments, in areas vulnerable to coastal hazards, including hazards exacerbated by sea level rise. Prohibit the creation of new lots (including adjusted lots) in such areas, unless it is demonstrated either that: 1) the new lot(s) would be permanently protected for open space, public access, or other similar purposes consistent with the LCP, or 2) resultant parcels contain a buildable area in which development on new lots would avoid impacts to coastal resources; would remain located on private property despite the migration of the public trust boundary; not require the future construction or augmentation of a shoreline protective device; maintain public services (e.g., water, sewer, and safe, legal, all-weather access as applicable) over the anticipated duration of the development; and otherwise be consistent with all LCP policies.

Exceptions

B.10 Takings Analysis

Where full adherence to all LCP policies, including for setbacks and other hazard avoidance measures, would preclude a reasonable economic use of the property as a whole, the [***city or county, or Commission if on appeal***] shall allow the minimum economic use and/or development of the property necessary to avoid an unconstitutional taking of private property without just compensation. There is no taking that needs to be avoided if the proposed development constitutes a nuisance or is otherwise prohibited pursuant to other background principles of property law (e.g., public trust doctrine). Continued use of an existing structure, including with any permissible repair and maintenance (which may be exempt from permitting requirements), may provide a reasonable economic use. If development is allowed pursuant to this policy, it must be consistent with all LCP policies to the maximum extent feasible.

C. DESIGN FOR THE HAZARD

Note: Accommodation strategies rely on methods that modify existing developments or design new developments to decrease hazard risks and thus increase the resiliency of development to the impacts of sea level rise. Design options for accommodation can be an important part of phasing a community's response to sea level rise impacts. The policy below is general, but could be customized to the applicable hazards a community is confronting. See Policy E.4 for flood hazard mitigation design options.

Adaptive Design

(Reference Policy E.4 Flood Hazard Mitigation)

C.1 Adaptive Design

For new development, where relocation and/or structure removal might be necessary at some time in the future, ensure that foundation designs or other aspects of the development will accommodate future relocation and/or structure removal. Such relocation and/or removal shall be demonstrated in final plans, and may be phased over time. Alternative design options should be considered and employed where appropriate and if site conditions allow, such as constructing smaller structures, increasing finished floor elevations, and installing wall flood vents.

Comment [CDA39]: A very imprecise standard

Comment [CDA40]: Could interfere with raising structures adequately

D. MOVING DEVELOPMENT AWAY FROM HAZARDS

Managed Retreat

D.1 Removal Conditions/Development Duration

New development on private property located in hazardous areas shall be conditioned to require that it be removed and the affected area restored if: (a) any government agency has ordered that the structures are not to be occupied due to coastal hazards, or if any public agency requires the structures to be removed; (b) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (c) the development is no longer located on private property due to the migration of the public trust boundary; (d) removal is required pursuant to LCP policies for sea level rise adaptation planning; or (e) the development requires new and/or augmented shoreline protective devices. Such condition shall be recorded on a deed restriction against the subject property.

D.2 Contingency Funds

Require property owners proposing new development in hazardous areas to document that financial contingencies are in place if it becomes necessary to modify, relocate and/or remove development that becomes threatened in the future by sea level rise and/or when removal triggers are met. For significant new development, such as hotels or multi-family housing, financial contingencies must be in the form of a bond, letter of credit, cash deposit, lien agreement or other security deemed adequate by the ***[insert City or County]*** Attorney.

D.3 Limited Authorization Period and Retreat Management Plan

Ut just as detailed un-building plans.(Reference Policy G.9– Managed Retreat Program for application to an area)

In areas vulnerable to current or future coastal hazards where there is a substantial risk of damage to the structure during the anticipated duration of the development, new development that is otherwise allowed and that is significant in size, scope or importance (e.g., multi-family housing, critical infrastructure, visitor serving resources, or shoreline armoring for such, etc.) shall be subject to a limited authorization period to allow time for development of a Retreat Management Plan for the site. The Retreat Management Plan shall fully evaluate methods for relocation, modification to or removal of the development, including removal of any shoreline protective device that is no longer allowed or needed, and remediation of the site. The plan shall evaluate and consider all potential constraints, including geotechnical and engineering constraints; potential phasing options with timelines; project costs; and potential funding options. The plan shall be submitted with documentation sufficient to support all analyses, methodologies, and conclusions.

Prior to the expiration of the authorization period, relocation or removal of the development and remediation of the site, or proposed retention of any portion the development beyond the initial authorization period, should be evaluated. If retention of any shoreline protective device is proposed, it requires an evaluation of alternatives to the shoreline protective device that are capable of protecting the development and that can eliminate and/or reduce impacts to public access, public views, shoreline processes, marine resources, and other coastal resources at the site. The information concerning these alternatives must be sufficiently detailed for evaluation of the feasibility of each alternative for addressing site issues under the Coastal Act and the LCP.

Comment [CDA41]: Another example of apparent disconnect between stated advisory status of Draft Policy Guidance and what appears to be attempt to establish foothold on new requirements.

Comment [CDA42]: This statement sounds cavalier ("any public agency" without any stated authority) in light of the impact of the decision.

Comment [CDA43]:

Comment [CDA44]: Is this the State Lands Commission Policy or is the CCC acting on their authority?

Comment [CDA45]:

Comment [CDA46]: CDA has previously indicated that bonding is not practical. Since the purpose of this document is to provide guidance, please provide specific guidance on how this policy could be carried out.

Comment [CDA47]: Under CCC definition of redevelopment , a higher percentage of structures would come under this requirement.

Comment [CDA48]: Is this to indicate that single family residences are not intended to be subject to requirements such as these?

Comment [CDA49]: Does this mean the authorization period is limited to the "time allowed for development of a Retreat Management Plan.?"

Comment [CDA50]: This essentially means that a permit is just temporary and after specified time will need to be completely redone.

E. MOVING HAZARDS AWAY FROM DEVELOPMENT

Note: The model policies below should be considered for relevant shoreline types.
It is important to note that the term "soft" shoreline armoring can refer to shoreline restoration projects, or to shoreline armoring that includes a natural component, such as a revetment that is buried beneath sand and vegetated. While the former may be a permissible restoration project in many circumstances, the latter constitutes shoreline armoring that is generally not permitted to protect new development, though is required to be approved if it is necessary to protect an existing structure or coastal dependent use, and is the least environmentally damaging feasible alternative, as required by the Coastal Act.

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E.1 Habitat Buffers

Provide a buffer of at least ***[insert distance of wetlands buffer]*** feet in width from the edge of wetlands or other environmentally sensitive habitat areas and at least ***[insert distance of wetlands buffer]*** feet in width from the edge of riparian habitat. A sea level rise buffer area shall be added to the habitat buffer if necessary to allow for the expected migration of wetlands and other shoreline habitats caused by sea level rise over the anticipated duration of the development. Uses and development within sea level rise buffer areas shall be limited to minor passive recreational uses, with fencing, desiltation or erosion control facilities, or other improvements deemed necessary to protect the habitat, to be located in the upper (upland) half of the buffer area. Water quality features required to support new development shall not be constructed in wetland buffers. Temporary uses may be placed in the sea level rise buffer area until such time as sea level rise causes the wetlands or other shoreline habitat to migrate to within 100 feet of the temporary uses, at which time, they shall be removed. All habitat and buffers identified shall be permanently conserved or protected through the application of a deed restriction, open space easement or other suitable device. All development, such as grading, buildings and other improvements, adjacent to, or draining directly to a habitat area must be sited and designed so it does not disturb habitat values, impair functional capacity, or otherwise degrade the habitat area.

E.2 Soft Shoreline Protection

Encourage the use of soft or natural shoreline protection methods, such as dune restoration, beach/sand nourishment, living shorelines, horizontal levees, and other "green" infrastructure as alternatives to hard shoreline protective devices. Soft shoreline protection devices shall be fully evaluated for coastal resource impacts, and shall only be approved if found consistent with the LCP policies related to shoreline protection. The ***[City or County]*** should consider how these options may need to change over time as sea level rises.

E.3 Avoid Adverse Impacts from Stormwater and Dry Weather Discharges

New development shall provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner to minimize hazards resulting from increased runoff and erosion. Runoff shall be directed inland to the storm drain system or to an existing outfall, when feasible. If no storm drain system or existing outfall is present, blufftop runoff shall not be channelized or directed to the beach or the ocean.

E.4 Flood Hazard Mitigation

If it is infeasible for new development to avoid flooding hazards, development should be designed to minimize risks from flooding, including as influenced by sea level rise, over the anticipated life of the development to the maximum extent feasible and otherwise constructed using design

Comment [CDA51]: This is something CDA staff is pursuing, with the intention of working with both adjacent private land owners and park agencies.

Comment [CDA52]: For Marin, this would require a change to Biological Policies that have already been approved by the CCC

Comment [CDA53]: Please explain how this requirement is or is not supported by Coastal Act sec. 30240 as currently written

techniques that will limit damage caused by floods. Residential design shall incorporate appropriate flood hazard mitigation measures, including: ***[include all applicable, and add any other appropriate measures]*** elevating the finished floor (e.g., above the estimated combined 100-year storm flood elevation considering sea level rise and wave uprush scenario); locating only non-habitable space below the flood hazard elevation; elevating and storing hazardous materials out of the flood hazard area; elevating mechanical and utility installations; prohibiting basements; and using flood vents and anchoring structures where appropriate. However, elevation should be limited to ensure consistency with visual resource protection policies, and to ensure that access to utilities, including water, sewer, and roads, can continue over the anticipated duration of the development. If such access cannot be ensured consistent with LCP policies, then conditions shall be added requiring assumption of risk, removal conditions, and retreat management plan.

F. BUILDING BARRIERS TO PROTECT FROM HAZARDS

Shoreline Armoring

Note: Managing shoreline armoring has been challenging for many local governments because urban areas are frequently made up of both developed and undeveloped lots. In addition, many developments in existence in 1976 have since been "redeveloped" through renovations, remodeling, additions, and complete demolition and rebuild. The reality of effective shoreline management is that the Coastal Act and LCPs must address and be applied to a wide variety of physical and legal circumstances that may not be addressed by a simple application of the clean Coastal Act distinction between existing development that may be entitled to shoreline armoring and new development that is not. A suite of shoreline armoring policies can offer guidance for many of the shoreline armoring contexts, laying out the general policies first, then offering details on prioritization, siting and design, mitigation, and expectations for the shoreline armoring in the future.

Comment [CDA54]: It is for the Legislature, not the CCC, to change the law.

F.1 Shoreline and Bluff Protective Devices

Shoreline protective devices, including revetments, breakwaters, groins, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes, are allowed when required to serve coastal-dependent uses or protect existing principal structures (i.e., development that existed as of January 1, 1977, when the Coastal Act took effect) or public beaches in danger from erosion, when there is no less environmentally damaging alternative. Any such structures shall be sited to avoid sensitive resources and designed to eliminate or mitigate adverse impacts on local shoreline sand supply and other coastal resources. Existing marine structures causing water stagnation or contributing to pollution problems and fish kills shall be phased out or upgraded where technically feasible.

Comment [CDA55]: This language is not required by the plain language of PRC Sec 30235., which specifically states the requirements ("local sand supply") and does not reference other such standards. The specific rule shouldn't get lost in general policy statement.

Section 30235 Construction altering natural shoreline
Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes 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. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible..

F.2 Prioritization of Types of Shoreline Protection

Shoreline protective devices shall only be permitted if no other feasible, less environmentally damaging alternative, including but not limited to removal or relocation of the threatened development, beach nourishment, non-structural drainage and native landscape improvements, or other similar non-structural options, can be feasibly used to address erosion hazards. Such non-structural options shall be identified, used and prioritized wherever possible to protect coastal resources, including coastal habitats, public recreational uses, and public access to the coast. Where such non-structural options are not feasible in whole or in part, soft protection (e.g., sand bags, revetments that are combined with dune restoration, etc.) shall be used and prioritized wherever feasible before any more significant hard shoreline protective devices (including, but

Comment [CDA56]: Again, not in 30235

Comment [CDA57]: This again fails to reflect the precise statutory language. See previous comment

not limited to, seawalls, revetments, breakwaters, groins, bluff retention devices, and piers/caisson foundation systems) are permitted.

F.3 Siting and Design to Avoid and to Mitigate Impacts

New shoreline protective devices shall be sited and designed to avoid coastal resource impacts to the maximum extent feasible, including through: eliminating or mitigating all adverse impacts on beach area and local shoreline sand supply; protecting and enhancing public recreational access; protecting and enhancing public views; minimizing alteration of, and being visually subordinate to, the natural character of the shoreline; avoiding or mitigating impacts to archeological resources; and protecting other coastal resources in a manner consistent with the Coastal Act.

Impacts from shoreline protective devices on beach area and local shoreline sand supply include: losing sand and beach area through the device's physical encroachment on a beach, fixing of the back beach, preventing new beach formation in areas where the bluff/shoreline would have otherwise naturally eroded, and losing sand-generating bluff/shoreline materials that would have entered the sand supply system absent the shoreline protective device. If such impacts cannot be avoided, they shall be mitigated through options such as new public access or recreational facilities. If such options are not feasible, proportional in-lieu fees that consider the full value of the beach—including with respect to impacts on shoreline sand supply, sandy beaches, public recreational access, public views, natural landforms, and water quality—may be used as a vehicle for impact mitigation provided that such in-lieu fees are deposited in an interest bearing account managed by the ***[insert City or County]*** and used only for acquisition of coastal public access areas and coastal public access and recreational improvements.

F.4 Repair and Maintenance of Shoreline Protective Devices

Repair and maintenance of existing, legally permitted shoreline protective devices may be permitted as repair and maintenance only if the activities do not result in an enlargement or extension of armoring and where an engineering or geological study demonstrates that, in the absence of such repair and maintenance, the structure(s) associated with and protected by the shoreline protective device would be subject to damage from identified coastal hazards. Repair and maintenance activities shall not result in a seaward encroachment of the shoreline protective device. Repair and maintenance projects shall include measures to address and mitigate all coastal resource impacts the shoreline protective device is having, including with respect to local sand supply, public views and public recreational access. Replacement of 50 percent or more of the protective device shall not be considered repair and maintenance but instead constitutes a replacement structure subject to provisions applicable to new shoreline protective devices.

F.5 Evaluation of Existing Shoreline Armoring

Applications for new development or redevelopment that is associated with and/or protected by existing shoreline protective devices shall not rely on the device for protection (see B.3 - Reliance on Shoreline armoring) and shall be required to provide an assessment of the continued efficacy and necessity of such shoreline armoring. This must include an evaluation of whether the shoreline protective device can be removed or modified (and affected areas restored to natural conditions) in light of the development proposed (e.g., if the development is being modified to provide a greater setback or relocated inland) to better protect public recreational access and other coastal resources. If the assessment indicates that existing shoreline protective devices can be removed or modified, including if there is a greater coastal resource benefit to removal or modification, and if the shoreline armoring is located on the same property as the proposed development, then removal or modification shall be required as a condition of approval for the development unless the armoring continues to be necessary to protect other existing structures or

Comment [CDA58]: Exempt piers used to elevate structures

Comment [CDA59]: Not supported by law. See above

Comment [CDA60]: Awkward and unnecessary phrase

Comment [CDA61]: Goes beyond 30235. See above

Comment [CDA62]: What is the Coastal Act support for this and following provisions How does it comport with sec. 30235?

coastal dependent uses entitled to protection. In all cases, shoreline protective devices shall only be authorized until the time when the qualifying development or resource that is protected by the shoreline protective device is no longer present and/or no longer requires protection.

F.6 Shoreline Armoring Duration

Shoreline protective devices shall only be authorized until the time when the existing principal structure that is protected by such a device: 1) is no longer present; 2) no longer requires armoring; or 3) is redeveloped. Permittees shall be required to submit a coastal permit application to remove the authorized shoreline protective device within six months of a determination that the shoreline protective device is no longer authorized to protect the structure it was designed to protect because the structure is no longer present or no longer requires armoring and the device is not needed to protect adjacent development that is still entitled to shoreline armoring. In the case of redevelopment, removal of the shoreline protective device shall be required as part of construction of the redeveloped structure.

F.7 Shoreline Armoring Mitigation Period

As a condition of approval for new, redeveloped or repaired shoreline protective devices, the ***[City or County]*** shall require mitigation of impacts to shoreline sand supply, public access and recreation, and any other relevant coastal resource impacts in 20-year (or smaller) increments, starting with the building permit completion certification date. Permittees shall apply for a coastal permit amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify or remove the shoreline protective device to lessen its impacts on coastal resources.

F.8 Shoreline Armoring Monitoring

As a condition of approval for new, redeveloped or repaired shoreline protective devices, the ***[City or County]*** shall require a monitoring plan to identify the impacts of the shoreline armoring on the surrounding area and determine when a shoreline protective device is no longer needed for protection. The monitoring plan shall specify requirements for periodic inspection for structural damage, excessive scour, or other impacts from coastal hazards and sea level rise, impacts to shoreline processes and beach width (both at the project site and the broader area and/or littoral cell as feasible), and impacts to public access and the availability of public trust lands for public use.

F.9 No Future Shoreline Armoring

Property owners shall be required to waive any rights to future shoreline protection, and private property owners shall be required to record that waiver, as a condition of approval of a coastal development permit for new development on a beach, shoreline, bluff, or other area subject to coastal hazards, including but not limited to tidal and storm flooding, wave runup, and erosion, as influenced by sea level rise over time (see also Policy A.3 – Assumption of risk). Shoreline armoring may be permitted to protect coastal dependent uses, or existing structures that were legally constructed prior to the adoption of the Coastal Act (i.e., January 1, 1977), when found to be the least environmentally damaging feasible alternative and when all feasible mitigation is provided, unless a waiver of future shoreline armoring was required by a previous coastal development permit.

F.10 Bulkheads for Waterfront Development

New development or redevelopment on property currently protected from flooding by bulkheads is permitted to rely on those bulkheads to demonstrate that the project will protect life and

Comment [CDA63]: CDA objects to definition of redevelopment.

Comment [CDA64]: Presumably determined by monitoring in "F8"

Comment [CDA65]: This will leave the structure unprotected from shoreline hazards. Is that the intent or is elevating structure to meet BFE in addition to seal level rise factor the solution on small lots with no opportunity for relocation?

Comment [CDA66]: "Existing" means existing at the time of application, and is not limited to structures that predated the Coastal Act.

property from coastal hazards if: 1) the existing bulkheads, and feasible augmentation of them necessary to protect the proposed structure over its life, do not alter natural shoreline processes along bluffs or cliffs or cause adverse impacts to public access, marine habitat, aesthetics or other coastal resources, including when considering migration of public trust lands and impacts from anticipated groundwater changes; and 2) property owners record a waiver of any rights to seaward expansion of the bulkhead as a condition of approval of a coastal development permit for new development when a coastal hazards report (see Policy A.4 –Site-specific Coastal Hazard Report Required) establishes that an existing bulkhead cannot be removed and/or an existing or replacement bulkhead is required to protect existing principal structures and adjacent development or public facilities on the site or in the surrounding area. Waiver of rights to future shoreline protection includes repair or maintenance, enhancement, reinforcement, or any other activity affecting the bulkhead, that results in any encroachment seaward of the authorized footprint of the bulkhead. The principal structure(s) should be set back a sufficient distance 1) to allow for repair and maintenance of that bulkhead including access to any subsurface deadman or tiebacks and 2) to allow for realignment of necessary bulkheads as far landward as possible and in alignment with bulkheads on either side.

Comment [CDA67]: Conditions not required by 30235

Comment [CDA68]: By eliminating the possibility of "refacing" a failing bulkhead, this requirement will make repair and replacement much more complicated and expensive

Comment [CDA69]: How does this apply to existing structures?

G. COMMUNITY SCALE ADAPTATION PLANNING

Note: Much of sea level rise adaptation for residential land use will require a community approach, as the scope of parcel level actions is too limited to address all coastal hazard impacts, especially when existing residential patterns are already located in hazardous locations. For example, unless individual bulkheads in a community are raised together, the lowest one will be the weak link and expose larger areas (homes and roads) to flooding.
Community scale adaptation plans should also take into account other climate change impacts (e.g. changes in precipitation patterns, fire frequency, etc.), and work with other counties and cities to develop and incorporate expectations for potential future impacts given other watershed scale changes. These changes may be related to climate change effects, other development upstream, or management decisions and processes.

Developing Adaptation Planning Information

G.1 Management of Sea Level Rise Hazards

Comment [CDA70]: None of this is a requirement under the Coastal Act. CCR **§ 13511. Common Methodology** sets out those requirements. In fact Coastal Act Sec. 30500(c) specifies "The *precise content of each local coastal program shall be determined by the local government,* consistent with Section 30501, in full consultation with the commission and with full public participation…"
The County has made significant progress in this regard under our Adaptation Planning process.

i. Gather information on the effects of sea level rise, including identifying the most vulnerable areas, structures, facilities, and resources; specifically areas with priority uses such as public access and recreation resources, including the California Coastal Trail, Highway 1, significant ESHA such as wetlands or wetland restoration areas, open space areas where future wetland migration would be possible, and existing and planned sites for critical infrastructure.

ii. The [***Insert city or county***] shall conduct a vulnerability assessment [by ***insert date***] using best available science identified pursuant to Policy A.1 - Identifying and Using Best Available Science - and multiple sea level rise scenarios including estimates of high projections of expected sea level rise.

iii. The [***Insert city or county***] shall update Sea Level Rise Maps at least every 10 years or as necessary to allow for the incorporation of new sea level rise science, monitoring results, and information on coastal conditions.

iv. Research the potential to increase setbacks for or relocate existing and planned development to safer locations in order to minimize hazards and protect coastal resources. Explore the feasibility of a managed retreat program, which may involve protecting vacant land through zoning or conservation easements and/or removing development from areas vulnerable to sea level rise and restoring those areas to a natural state for open space or recreation. Identify potential mechanisms and incentives for implementation, which may include options to:

a. Acquire vacant vulnerable properties.
b. Acquire developed vulnerable properties before damage occurs.
c. Acquire developed vulnerable properties after significant destruction by storms, erosion, or high tides.
d. Explore the feasibility of public parkland exchange programs that encourage landowners to move out of hazardous areas.
e. Identify and make available (e.g., through rezoning) land outside the hazard areas to allow owners of vulnerable properties to relocate nearby.
f. Explore clustering of development density in areas not vulnerable to coastal hazards and limiting development in areas that are vulnerable.
g. Develop Transferable Development Credit programs.
h. Develop programs to phase out the use of homes in coastal hazard areas, such as through leasebacks.
i. Work with entities that plan or operate infrastructure, such as Caltrans, public utilities, railroads, water districts, etc., to plan for potential relocation or realignment of public infrastructure impacted by sea level rise.
j. Develop Geologic Hazard Abatement Districts (GHADs), County Services Areas (CSAs), or other similar entities to address the prevention, mitigation, abatement, and control of geologic hazards for specific neighborhoods

v. Join and/ or facilitate collaborative sea level rise adaptation efforts with other local, regional, state and federal entities to promote restoration or enhancement of natural ecosystems, such as coastal wetlands and sandy beaches.

vi. Support efforts to monitor sea level rise impacts to recreational resources, natural resources and ESHA, including ***[insert names of beach areas]***; ***[insert names of wetland areas]***; and ***[insert names of creeks]***and other creeks; rocky intertidal areas, beaches and other habitat types vulnerable to sea level rise. Collaborate with other local, regional, state and federal entities to establish monitoring methods and track the effects of sea level rise.

vii. Promote natural infrastructure pilot projects (horizontal levees, dune restoration, etc.) with environmental benefits that enhance natural and recreational resources while protecting assets from sea level rise and increased storm surges. Study and monitor such projects over time and share lessons learned with other jurisdictions.

viii. Update standards for ESHA buffers and setbacks to account for sea level rise, based on the best available science and considering the effects of shoreline development on landward migration of wetlands.

Comment [CDA71]: It would be helpful for the CCC to work with the NPS to encourage them to participate in such swaps, and through the CCC Federal Programs and Consistency authority to create incentives to do so.

Comment [CDA72]: Smaller local governments could benefit from the Commission using its considerable influence to have Caltrans dedicate cooperation, time and attention to SLR issues affecting Highway 1 and other state roads.

Comment [CDA73]: See above

Comment [CDA74]: The CCC should actively steer more state and federal resources to local governments to enable this to happen.

Comment [CDA75]: These will be to some extent experimental project. Some questions about them may not have immediate answers. The Commission should nevertheless expedite the approval of coastal permits even in the face of some uncertainty.

G.2 Adaptation Plan

Develop and implement an adaptation plan that examines priorities for adaptation, timelines, options, specific projects to be implemented, phasing and action triggers. As components of the adaptation plan, assess seasonal and long-term shoreline changes and the potential for flooding or damage from erosion, sea level rise, waves, storm surge or seiches. Plans should provide recommendations for adapting existing development, public improvements, coastal access, recreational areas, and other coastal resources. Plans should evaluate the feasibility of hazard avoidance, managed retreat, restoration of the sand supply and beach nourishment in appropriate areas.

Comment [CDA76]: As noted above, our Adaptation Plan is separate from the LCP. As implementation projects come forward, necessary coastal permits will be sought.

Sea Level Rise Overlay Zones

Note: Policies on Sea Level Rise Overlay Zones should cross reference relevant LCP policies that provide the actions triggered by the presence of the zone. An overlay zone can meet multiple objectives, set boundaries based on a worst case scenario, and define the policy considerations for those areas. For example, policies in Sea Level Rise Overlay Zones might trigger downzoning, redevelopment restrictions, structure removal, or other adaptation measures for development. A Sea Level Rise Overlay Zone could also be incorporated into a shoreline management plan that preserves coastal resources in the long term, allows for inland shoreline migration, and defines future expectations for what development will be permitted in sea level rise hazard zones going forward.

Comment [CDA77]: All of these through G11 are of course *"advisory and not a regulatory document or legal standard of review"* as provided in the preamble to this document.

G.3 Sea Level Rise Hazard Overlay Zone

(Reference Policy A.3 Mapping Coastal Hazards)
Minimize risks to life and property associated with sea level rise through application of policies and standards specific to the Sea Level Rise Hazard Overlay Zone [***insert reference to maps, e.g., (see Figure X)***]. Policies in this section ***[insert section or policy numbers]*** shall apply to all properties within the Sea Level Rise Hazard Overlay Zone.

G.4 Beach Open Space Zone

Establish a 'Beach Open Space' zone located in ***[the defined hazard/management area]*** to provide for current and future beach access and management, including inland migration of the beach as sea level rises. The purpose of the zone is to provide for protection of the migrating/ambulatory beach and public access to and along it. All existing development that is not for public access or recreation would become non-conforming in the zone district. Unless otherwise required to be approved pursuant to other LCP policies, new development would be prohibited within the zone, with the exception of : 1) new development on properties that participate in the Managed Retreat Program as specified in Policy G.9–Managed Retreat Program, and 2) development related to habitat restoration, public access or beach/ocean recreational opportunities.

Community Scale: Beach and Dune Adaptation

G.5 Beach Nourishment

In coordination with the Coastal Commission and other permitting agencies (e.g., State Lands Commission, U.S. Army Corps of Engineers), develop and implement a comprehensive beach nourishment program to assist in maintaining beach width and elevations. The beach nourishment program should include measures to protect water quality and to minimize and mitigate potential adverse biological resource impacts from deposition of material, including measures such as sand compatibility specifications, restrictions on volume of deposition, timing or seasonal restrictions,

Comment [CDA78]: As a consequence of our support of the Marin/Sonoma CRSMP, CDA is hoping to start such an effort with involved agencies soon.

and identification of environmentally preferred locations for deposits. The [***insert City or County***] should consider developing an opportunistic sand program and determining how replenishment options may need to change over time as sea level rises.

Community Scale: Bluff Erosion Adaptation

G.6 Improve Drainage on Bluffs to Reduce Erosion

Investigate areas which could be significantly contributing to increased groundwater flows to the bluffs and determine whether improving drainage and/or reducing irrigation could potentially reduce bluff erosion. If measures to improve drainage or reduce over-watering are found to have the potential to reduce bluff erosion, the ***[insert City or County]*** should inform property owners about appropriate irrigation practices and drainage improvements as part of existing water conservation outreach programs.

Trigger-Based Adaptation Approaches

Note: Trigger-based adaptation approaches present a mechanism by which adaptation actions can be phased over time. These policies should be developed through a community adaptation planning process that specifies appropriate trigger types and responsive actions (e.g., beach nourishment) or programs (e.g., managed retreat program). Model policies G.7 – G.9 contain conceptual elements or triggers that could be written in a single customized policy for a particular location. For example, a managed retreat program could use repetitive loss or beach width triggers to set community priorities for targeted buy-outs. Additionally, a similar policy to the managed retreat program for beaches could be applied for wetlands or other habitat areas subject to sea level rise.

G.7 Repetitive Loss

The ***[insert City or County]*** shall develop a Repetitive Loss Program to eliminate or reduce damage to property, impacts on coastal resources, and the community disruption caused by repeated flooding or storm damage. A Repetitive Loss Structure is a structure that has suffered damage and filed FEMA claims on two or more occasions during a rolling 10-year period. The Repetitive Loss Program shall require properties with Repetitive Loss Structures to be rezoned over time to less intensive uses to accommodate shoreline migration, increased coastal flooding, inundation, and related sea level rise impacts. The Program shall include maintaining a database of property flooding and damage to further identify and monitor local hazard areas, as resources are available. Where hazards cause reasonable use to be difficult to achieve, acquisition of the property by the ***[insert City or County]*** shall be encouraged.

G.8 Beach Management Plan

Establish a comprehensive beach management plan within the framework of adaptation planning and regular LCP updates to protect and enhance existing beach areas. The Plan shall identify actions and programs that can be implemented in the near term or would be implemented based on pre-determined future triggers to preserve recreational, habitat, and other coastal resource values and should include research into opportunities for additional adaptation actions that would be implemented based on future impacts. The beach management plan shall also include and expand upon the following actions:

a) Establish a minimum beach width that maintains optimum public recreational access and habitat function. The analysis used to establish the minimum width shall include considerations of daily tidal range, seasonal erosion, and short-term, storm driven

Comment [CDA79]: Such a program would of course be voluntary at the discretion of a local government since the Coastal Act does not require managed retreat programs

erosion.

b) Establish appropriate triggers for sediment management activities and/or implementation of the Managed Retreat Program (Policy G.9) so that width is maintained as the beach naturally migrates over time in response to erosion, sea level rise, and other coastal processes
c) Monitor beach width, mean high tide and bluff toe elevation.
d) Monitor public access, beach use, and any impacts to public trust lands. Identify and track locations, times, and durations throughout the year when the beach is too narrow to be adequate for recreation and/or lateral access.
e) Pursue opportunities for beach nourishment or otherwise increasing beach widths and enhancing beach access.
f) Evaluate adaptation opportunities for vulnerable roads and highways that provide beach access, and pursue opportunities that would maintain vehicular, bicycle and pedestrian access while protecting the beach and public access to it.
g) Revise the ***[City or County's]*** Local Hazard Mitigation Plan to provide for and support the Managed Retreat Program and to incorporate findings of relevant Vulnerability Assessments or Adaptation Plans.

G.9 Managed Retreat Program

Establish a Managed Retreat Program to remove, modify or relocate development when necessary to protect and provide for the migrating shoreline. The Managed Retreat Program must consist of at least the following components:.

a) When the beach area of [***insert jurisdiction or specific beach name(s)***] is reduced below the minimum beach width established pursuant to Policy G.8, development adjacent to the beach that has participated in the Managed Retreat Program must be moved, modified or removed and the area restored to open space to ensure the minimum beach width of ['[***XXX feet' or 'to restore adequate public access to the beach' feet***].

b) All new development, which includes redevelopment including but not limited to modification of the foundation for elevation, in the Beach Open Space zone must participate in the Managed Retreat Program. Permits for such development shall be conditioned to require its modification or removal when necessary to maintain the minimum beach width, and a deed restriction must be recorded to carry out this requirement and notify all new owners of this condition.

c) The [***insert City or County***] shall pursue funding to purchase easements or development rights for existing development from property owners who voluntarily participate in the Managed Retreat Program. Restrictions applied pursuant to voluntary participation may be structured such that managed retreat cannot be triggered on the subject property for a minimum length of time, such as a minimum of 30 years, unless the structure is damaged or threatened and modifications to the structure itself (such as elevation or floodproofing) cannot address the threat. Funding for the voluntary program may come from in-lieu fees, grants, or other state or federal funds.

d) The [***insert City or County]*** shall pursue funding to acquire non-conforming structures within the Beach Open Space zone and lease these residences to provide residential or vacation rental use until such a time that the structure routinely blocks lateral public access; is within the minimum beach width area; is damaged beyond ***[XX%] or is threatened with imminent damage;%];*** is no longer habitable; or leasing becomes otherwise infeasible.

Comment [CDA80]: Such a program would of course be voluntary at the discretion of a local government since the Coastal Act does not require managed retreat programs

Comment [CDA81]: As noted, CDA objects to this notion which is not in the Coastal Act.

Comment [CDA82]: Voluntary.

Comment [CDA83]: Voluntary

Transfer of Development Rights

Transfer of development rights (TDR) is a market-based tool that can help implement phased retreat from shoreline hazard zones. TDR programs enable individual transactions to transfer development rights from privately owned parcels (i.e., sending sites) to areas that can accommodate additional growth (i.e., receiving sites). Property owners in sending areas receive compensation for giving up their right to develop, while developers in receiving areas pay for the right to develop at greater densities or heights than would otherwise be allowed by current zoning. TDR is not intended to limit growth, but can allow communities to identify which areas are suitable to receive development rights and how much additional development is appropriate.

G.10 Transfer of Development Rights Program

The City shall encourage the protection of ***[insert description of shoreline such as coastal bluff tops, dunes, or beaches]*** by establishing a Transfer of Development Rights program that concentrates development in receiving districts that are outside of areas vulnerable to sea level rise and provides for the transfer of development rights from sending districts that are in areas vulnerable to sea level rise.

Comment [CDA84]: Voluntary.

Financing Adaptation

Geologic Hazard Abatement Districts (GHADs), County Service Areas (CSAs), and other similar entities provide a potential means for funding sea level rise adaptation measures on a neighborhood scale. By accumulating a funding reserve for anticipated future needs, a GHAD or CSA can provide the financial resources necessary for adaptation approaches that extend beyond a single parcel. Typically, these entities can borrow from lenders or issue bonds with very attractive credit terms.

G.11 Geologic Hazard Abatement Districts (GHADs) and County Service Areas (CSAs)

Explore the feasibility of forming Geologic Hazard Abatement Districts (GHADs) and/or CSAs to fund measures to address the prevention, mitigation, abatement, and control of geologic hazards within a designated sea level rise hazard zone.

Comment [CDA85]: Voluntary.

Page 39: [1] Comment [CDA6] **CDA** **9/26/2017 2:12:00 PM**

Please clarify the phrase s “Groundwater Inundation’ and “uprising of groundwater” in terms of the physical processes these phrases are intended to describe.

As evidenced by the restricted geographic scope and slow pace of implementation of California’s Sustainable Groundwater Management Act, assessing potential groundwater impacts is an expensive and challenging proposition. Since the purpose of this guidance is to assist applicants and local governments in addressing the Coastal Act, will the CCC work with appropriate state agencies to provide useful information about groundwater and sea level rise?

,

Matella, Mary@Coastal

From: Kathleen McCarthy <kathlmcc@aol.com>
Sent: Friday, September 29, 2017 3:30 PM
To: ResidentialAdaptation@Coastal
Subject: Del Mar Beach Front Properties

It is unreasonable to even consider asking longtime property owners to abandon their homes for a "maybe" future sea level rise.
Kathleen McCarthy

Sent from my iPhone

September 29, 2017

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Cc: Jack Ainsworth and Madeline Cavelieri

Re: Comments on Draft Residential Policy Guidance

Dear Executive Director Ainsworth and Honorable Commissioners,

On behalf of the undersigned organizations (Organizations) representing hundreds of thousands of Californians, we submit the following comments for the Draft Residential Adaptation Policy Guidance document (Guidance). The Organizations are committed to protecting coastal habitat and public access in the face of sea level rise, and have – in the aggregate – dozens of years of working toward the protection of California's iconic coastline.

The Organizations applaud the California Coastal Commission (CCC) for its ongoing leadership on coastal adaptation, and specifically for developing this residential adaptation guidance for local governments struggling to address the challenges and impacts of sea level rise (SLR). Residential development is one of the most prevalent types of development within the coastal zone and also poses one of the most controversial management challenges, making the Guidance extremely important in identifying effective solutions to sea level rise adaptation planning.

This is an extraordinary time to be discussing coastal vulnerability and adaptation. With hurricane after hurricane in the Southeastern US highlighting the risks associated with coastal development, no adaptation strategy seems like enough. California's coastal development may be less vulnerable than that of other states, however, we are also starting from a position of believing – and wanting to do something about – climate change. A posture that puts us in stark contrast to the states recently experiencing the greatest coastal flood damage. Your leadership on this issue is valuable and greatly appreciated.

The State of California has made substantial progress in promoting sea level rise science and adaptation. The CCC has provided very specific guidance on how communities should plan and adapt (August 2015 California Coastal Commission Sea Level Rise Guidance), and several state agencies have policies that guide their own activities in the face of sea level rise. The Ocean Protection Council, the California Coastal Commission, and the State Coastal Conservancy are granting funding support for vulnerability assessments, Local Coastal Program

updates to incorporate consideration of sea level rise, and other activities targeted at developing climate readiness. As a result, a growing number of coastal communities now have access to high-resolution vulnerability information that can provide a strong foundation for their adaptation planning.

Among the most significant issues driving coastal management and policy in the face of sea level rise is the need to protect private property. Sea level rise and associated flooding will threaten nearly $100 billion worth of property along the California coast by 2100, and coastal landowners and planners will inevitably act to protect their assets from these losses. Landowners overwhelmingly default to the industry standard – specifically, coastal armoring solutions (seawalls, revetments, dikes and levees) for mitigating these risks. While armoring may be the right choice in some locations, it has well-documented adverse consequences, including interrupting natural geological processes leading to shrinking coastal habitat areas, increased erosion and impacts to coastal dependent species, including fisheries (Stamski 2005). Nature-based strategies that enhance the natural flood mitigation benefits of coastal ecosystems could be an effective alternative, avoiding the adverse consequences of coastal armoring. However, few California jurisdictions have policies that prioritize nature-based strategies, and individual property owners rarely choose them. This is despite recent research comparing economic impacts of various adaptation strategies and finding that armoring strategies were generally not cost-effective.

General Comments

We cautiously support the adoption of the trigger-based approach in the Guidance, but suggest clarifying that the stages along each adaptation pathway should not create path-dependence, and that for many places, retreat (whether it is managed or forced by flooding) may be the end result. Although it is true that, in general, the patterns of residential development along the coast were established pre-Coastal Act, we should not understate the reality of the perpetuation of those patterns, and our collective role – particularly the CCC's – in that. The "end game" of coastal adaptation is managed retreat in many of our nearshore communities. This is true regardless of whether we care at all about protecting natural resources – managed retreat will be needed to protect public safety. Recognizing that communities may not be ready to accept this yet, the trigger-based approach is a realistic alternative so long as the Commission identifies an accountable entity to establish a baseline, monitoring, and ties it to enforcement.

We are very pleased to see the CCC explaining the impacts of armoring in relation to SLR and the conflict that exists when residential development is protected at the expense of public resources. We hope the CCC will continue to discourage the use of hard structures since they only exacerbate erosion and damage valuable public resources. To do so, the CCC will need to take a clear stance on areas of conflict including protection of the public trust and prohibit armoring for any new development located within a coastal hazard zone.

Armoring the shoreline has historically been California's primary response to coastal hazards, but this coastal management panacea is maladaptive as it actually reduces coastal resilience.

The Guidance explains that beach loss due to armoring will result in reduced public access, fewer opportunities for recreation, loss of habitat, and loss of revenues. The physical, ecological, economic, social, and aesthetic effects as well as the impacts to access resulting from coastal armoring are why the Organizations believe it is critical that the Guidance speak clearly and directly on the subject.

The Guidance supports the use of "best available science" as a policy option to inform the best adaptation approach for a community. However, best available science should not be categorized as a policy option, in that it is neither policy nor optional. In addition, particularly in the coastal zone, the best available science is often not good enough to make an informed (or safe) decisions. Specifically, some regions have excellent SLR data and others do not. Further, some data – like where the seawalls and levees are – have not been updated sufficiently recently to be even marginally useful. Finally, we simply don't know where some of our habitats are, or how they are used by the wildlife that uses them. It is in such cases that the Commission's policy guidance is uniquely crucial. A clear preference for "soft" solutions should be emphasized in the Guidance in order to proactively and precautionarily protect valuable public resources.

Typology is a useful way to organize our thinking about alternative adaptation approaches and their relative exposure, and we support further development of the Typology presented in the Guidance in order to enhance its usability in local decisionmaking. The typology is limited to a characterization of the geophysical context in which the development exists, and as such fails to consider some of the most significant constraints to adaptation. Additional factors in the typology should include the significance of the habitat in the vicinity of the development and socioeconomic characteristics. Finally, the parameters included in the typology should combine to enable policy recommendations and should link to specific strategies, making it easier for communities to develop their own specific plans.

The Guidance Should Make Specific Recommendations Related to Emergency Armoring

Miriam-Webster defines "emergency" as: *an unforeseen combination of circumstances or the resulting state that calls for immediate action*. "Emergency" is not a defined term under the Coastal Act, but section 30611 describes the conditions under which permits may be waived as follows:

> When immediate action by a person or public agency performing a public service is required to protect life and public property from **imminent danger**, or to restore, repair, or maintain public works, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of emergency, the requirements of obtaining any permit under this division may be waived upon notification of the executive director of the commission of the type and location of the work within three days of the disaster or **discovery of the danger**, whichever occurs first. Nothing in this section authorizes permanent erection of structures valued at more than twenty-five thousand dollars ($25,000). (Emphasis added)

In describing the need for immediate action, the Coastal Act contemplates both imminent danger and a recently discovered condition. However, in a number of recent cases, the Commission has approved the construction of emergency seawalls under circumstances that are neither unforeseen nor require immediate action. For example: California's 2016-17 series of winter storms eroded the San Onofre State Park Beach's lower parking lot and access road. The erosion was neither unforeseen nor sudden and catastrophic. In an effort to maintain maximum access – as contrasted with protection of life and limb – State Parks was granted an emergency permit to install 900 linear feet (the length of three football fields) of riprap to protect the road and a portion of the parking lot. While this specific example is not residential, similar stories are told of emergency permits granted under conditions that do not meet any meaningful definition of "emergency." While abuse of this provision is not universally the case among seawall permit applicants, it is an increasingly well-known tactic to make an end-run around compliance with the provisions of the Coastal Act.

The Guidance does not address emergency and temporary armoring policy. The Coastal Commission itself estimated that between 150 and 400 seawalls have been authorized under an emergency permit, but lack a follow-up CDP. Within the past decade alone, ninety-three emergency permits have been issued; the Surfrider Foundation researched all 93 emergency permits and did not find evidence that a single one was removed – but we did find many were made permanent. Despite even the best of intentions and permitting conditions, emergency seawalls and revetments are almost never removed once established.

One major concern with emergency armoring is that it precludes any meaningful consideration of alternatives, an especially troublesome factor for Local Coastal Program updates that may be currently underway. We must rethink – and reject – the current emergency armoring policy. While individual permits may seem relatively harmless, they add up to a significant linear distance when aggregated – and the aggregated associated impacts are similarly severe. Specifically, the Commission should include model policy language in the Guidance that will encourage the following:

1. **Use the strongest definition of "emergency."** A bluff or structure that has been failing for years should not be accorded an emergency permit for repair or maintenance. Winter storms – and the associated erosion – are by no reasonable definition "unforeseen" and a property owner's lack of adequate planning should not be an excuse to force the CCC's hand. The Commission should default to requiring a full CDP to allow for thoughtful analysis and public input, unless there is a robust showing of both imminent danger and unpredictability.
2. **Encourage the use of softer solutions,** especially for temporary emergency situations. Hard armoring should always be a last resort option. The alternative is Natural Shoreline Infrastructure, which has been shown to be a cost-effective approach to mitigating the risk from floods, storms and sea level rise. Natural Infrastructure overcomes many of the shortcomings of coastal armoring by working with – rather than against – natural coastal processes. In addition, these systems provide important co-benefits for coastal

communities; natural coasts can serve as protective buffers against sea level rise and storm events while continuing to provide access, recreation opportunities, wildlife habitat and other social benefits.

3. **The cumulative statewide impacts should always be considered** in the granting of emergency permits.
4. If emergency armoring is approved, **include and enforce an expiration date and removal plan.** Further, require a removal bond to be held by the applicant as a permit condition to ensure funding exists for removal of the seawall or revetment once the emergency permit expires.

Finally, all armoring (even so-called "soft" armoring) must be considered temporary - a bridge strategy. Given the projected impacts from climate change, alternative approaches will eventually be necessary, such as managed retreat. For more information on the impacts of coastal armoring, please see Stanford Law School's 2015 *California Coastal Armoring Report: Managing Coastal Armoring and Climate Change Adaptation in the 21st Century.* The key recommendations from the report are very relevant to the Guidance.

Clarify Public Access Requirements and Public Resource Protections

The Coastal Act

The Organizations strongly support the definition of existing development on page 16 of the Guidance. This definition represents the most reasonable and straightforward interpretation of that section, under CURRENT law, reflecting the clear legislative intent to allow shoreline protection as-of-right for development that was in existence when the Coastal Act was passed. That doesn't mean that armoring for post-1977 development is not allowed under the Coastal Act. It only means that applicants for armoring for post-1977 development need to comply with the other provisions of the Coastal Act – the seawall isn't an entitlement.

Accordingly, as the Guidance explains, relevant Coastal Act policies 30233, 30235, 30253, 30240 and 30233 provide that while coastal armoring has significant adverse impacts, there are situations where it may be reasonable. In this discussion, the CCC should be specific about the guarantee of public access to tidal lands implicit in the need to comply with the other provisions of the Coastal Act, including both horizontal and vertical access. That is, under Coastal Act Sections 30210, 30220, 30221, and 30213, the public shall be afforded maximum access to walk along the beach and to be able to obtain access to the beach from inland locations, including all existing and planned trails and other lateral accessways, for the enjoyment and recreation of these public trust resources.

Any encouragement of coastal development and fortification is not consistent with the policies and procedures of the Coastal Act, since it will jeopardize near shore ecosystems, beach access and even coastal infrastructure and private property.

While the Organizations applaud the Commission's focus on providing continued protection of sensitive habitats and public access under changed circumstances in the future, the current Guidance does not go far enough to ensure lasting protection of coastal habitats and public access. A policy is needed to ensure robust enforcement and removal of structures that no longer conform with the Coastal Act. Otherwise, California will adopt a de facto policy of permanent development and fortification.

The Public Trust Doctrine

The Organizations appreciate the Commission's legal analysis of the Public Trust Doctrine and the Commission's duty to protect public trust resources for the benefit of the general public. The Organizations ardently agree that public lands must be protected from the harms of seawalls and other coastal armoring and encourages the Commission to take action to protect these lands for future generations to access and enjoy.

Specifically, as the Commission acknowledges in this Guidance, trustee agencies that protect the Public Trust assets, such as the coastal lands, have the authority to refuse to allow, or require removal of, shoreline armoring located on public trust lands, including if armoring interferes with public trust uses, such as water-oriented recreation and environmental protection (See p.22).

The Guidance must clarify the extent to which local governments should plan to protect the Public Trust in the model policy language, and the role of local governments versus the role of the State Lands Commission. In order to protect public resources, local governments will need comprehensive plans that address the landward migration of the mean high tide line and development that is eventually below the tide and becomes a nonconforming use. The model language does not go far enough to protect public resources, including policies F.3 and G.3. The Commission needs to assert that, under certain circumstances, local jurisdictions need to proactively plan for removal of existing armoring and residential development that encroaches on the public trust due to SLR.

Further, the CCC should use its influence to encourage the State Lands Commission to develop specific policy of its own to guide response actions when private property ends up on public trust lands. As sea level rises, this will happen with increasing frequency. An analysis by the Nature Consrvancy (TNC) indicates that with 5 feet of sea level rise, 83 square miles of the Coastal Zone will transition from Coastal Commission jurisdiction to Public Trust land under the jurisdiction of the State Lands Commission statewide. Without a science-driven, transparent approach to implementing its public trust obligations, the State Lands Commission risks unintentionally alienating public trust resources, both illegally and with long-term costs to California's ecology and economy. Given the vast amount of residential development along the coast, it is clear many houses will soon be lower than mean high water. Consequently, there needs to be close coordination of SLR adaptation policy among the CCC and SLC.

A working group of coastal land use and public trust experts, convened by Stanford University's Center for Ocean Solutions, has published a *Consensus Statement on the Public Trust Doctrine, Sea Level Rise, and Coastal Land Use in California.* The Statement, accompanied by an in-depth white paper, provides a consensus interpretation of what the public trust doctrine requires of California coastal decision makers and how these decision makers can utilize forward-thinking strategies to protect public interests in the coastline from the threats of sea level rise. We recommend that the CCC use this excellent resource when enhancing this policy.

Additionally, there needs to be a new, reinvigorated approach to takings law, in the face of sea level rise. Part of the story is told by the case law on regulatory takings, which is evolving in a more-or-less neutral direction since the Court of Appeals decision in *Lynch vs. California Coastal Commission*. However, another strategy may be paying "just compensation," thus avoiding a takings claim in the first place. Further discussion on potential funding sources is included below (see pg. 8-9).

One recommendation is to charge occupancy fees for seawalls below mean high tide. As the Guidance recognizes, California law establishes that all coastal lands below mean high tide belong to the State and are held in trust for the public as a whole. Under the Supreme Court's precedent in *Illinois Central Railroad Co. v. Illinois* (146 U.S. 387, 13 S.Ct. 110) the State may not abdicate public trust property to private entities. Thus, at a minimum the CCC must develop a scheme to charge littoral owners for the use and occupancy of public trust lands when seawalls come to lie below the naturally-occuring location of the mean high tide line. This is true for all seawalls along California's coastline, even if they protect pre-Coastal Act structures. The Organizations recommend that any funds so collected be dedicated to improving public access to the coast.

Areas for Improvement

Setbacks and Buffers

Local governments should increase mandatory setbacks from the coast and must understand how setbacks are a critical component to SLR planning and adaptation. Policy B.1b for shoreline-specific development currently states, "*Development shall be setback a sufficient distance to prevent impacts to coastal resources, minimize coastal hazards over the anticipated life of the development, assures stability and structural integrity of the development, and not contribute to erosion, geologic instability, or destruction of the site or surrounding area."*

This policy should go into greater detail on determining setbacks in order to protect coastal resources in the face of sea leve rise. The Organizations believe local government should be required to leave open space sufficient to support natural and beneficial functions (such as wetlands that prevent runoff and flooding), both now and in the future. Specifically, governments should require that development adjacent to the shore leave buffers to provide natural protection to development while allowing for upland migration of beaches and wetlands.

Specific setback calculation requirements for non-blufftop shoreline development should also be specified as they are for blufftop development in policy B.5, Determining Bluff Setback Line. Those calculations should establish setbacks based upon projected shoreline position using calculations of increased flood and/or erosion rates, or create a tiered setback system permitting smaller structures with less of a setback and requiring greater setbacks for larger development.

Further, policy B.2 - Removal Plan Conditions for New Development in Hazardous Areas does not adequately address potential impacts to public resources. This policy requires new development to be tied to a removal plan that specifies the property owner's responsibility to remove any new development in hazardous areas. Policy B.1b allows new development within a coastal hazard zone, contingent upon a removal plan as required in policy B.2. These two policies may result in new residential development or redevelopment quickly becoming a nonconforming use in violation of the Coastal Act as sea levels rise, placing additional burden on already maxed out enforcement staff capacity. Experience demonstrates that once development is permitted along the coast, it can be essentially permanent.

Ideally, for properties that do not have sufficient space to comply with setback requirements, no new development should be permitted within coastal hazard zones. If certain situations must be approved, such as to avoid a taking, then a contingency fund and strict conditions should be required in order to ensure the property owner has the incentive and funds available to remove the structure once it begins to impact coastal resources.

Encourage Establishment of Baselines, Identify Thresholds and Monitor for Changes

The Analyzing Alternative Adaptation Strategies section of the Guidance (see pages 11 and 56) suggests the use of adaptation triggers such as designated beach width reduction or occurrence of flooding that would call for specific actions, such as sediment management activities or managed retreat. The Organizations support this approach. A trigger based approach will help local communities ensure and require appropriate adaptation policies given scientific uncertainty on the rate of sea level rise.

In order to inform and identify thresholds and triggers, the CCC should encourage local governments to establish baseline conditions, model a range of possible climate change impacts and responses, and monitor actions to detect changes in baseline conditions and determine efficacy of adaptation measures. Specific policy language should be developed, recommending that local governments study and understand baseline conditions, where thresholds have been exceeded in the past, and where they may be exceeded in the future on a community scale.

Climate change impact modeling and related technical studies are important but can result in "analysis paralysis" that comes with inherent uncertainty of sea level rise rates. By focusing on community scale thresholds, local communities can avoid getting stuck in debates over SLR modeling and never-ending analysis. Communities should instead be encouraged to focus their

efforts on developing a range of responses to various climate change hazard scenarios and appropriate policies, triggered by predetermined thresholds.

The Organizations also have concerns regarding policy G.8 - Beach Management Plan, which establishes a framework to protect beach areas. One element that we recommend including is the requirement to develop a sediment management plan. Policy G.8b establishes a trigger for sediment management activities but needs to specify that a comprehensive sediment management plan should be developed as well. A sediment management plan will establish a sediment budget and aid local governments in evaluating a multitude of actions that can be taken to effectively manage sediment and restore beaches, such as restoring watersheds to a more natural state.

Floodplain Buyouts and Easements

There are over 3,000 properties in California that FEMA categorizes as “Repetitive Loss,” meaning that they have made 2 or more claims against their federal flood insurance in any 10 year period. Although our state and local governments – including the Commission - have demonstrated visionary leadership in promoting local preparation for sea level rise and flooding, it’s not enough. Neither the state nor the local plans go far enough, and even if they did, there is no money for implementation.

Although state policy demands that we prioritize natural infrastructure in management decisions, there is still a huge deficit in the deployment of these approaches, relative to hard armoring of property for protection. Managers lack a thorough understanding of what natural infrastructure is and how it functions as an alternative to coastal armoring. They need information on how and where natural infrastructure can be deployed to maximize risk reduction as well as ecological, recreational and economic benefits. And they need a means of financing these options.

In some of our urban coastal areas, natural infrastructure means getting homes, businesses and built infrastructure out of flood plains. This approach is safer for our communities, promotes natural resilience, and saves money. Acquiring repeatedly flooded properties in floodplains is one way to begin working toward this – it is a strategy that FEMA supports through its Hazard Mitigation Assistance programs, and TNC has developed a science-driven approach to implementing the prioritization of properties to protect both people and nature (see Calil et al. (2015) and Calil and Newkirk (2017)).

This Guidance courageously presents ideas for floodplain buyouts in a more forthright way than we have seen in any previous policy document. Floodplain buyouts and easements will be essential tools for communities when dealing with the effects of climate change. Eventually, many communities will need to retreat from the rising seas and increasing storm surges as a matter of safety. Local, state and federal governments need to be prepared to facilitate this process. A thoughtful approach will help prioritize buyouts, protect our most vulnerable areas and provide a variety of funding mechanisms. The Guidance needs to elaborate on its policy approach for floodplain buyouts and easements.

One of the big hurdles to actually implementing a floodplain buyout is that although FEMA could technically support such an action, the process of generating funding and coordination can be so slow that property owners have already spent their disaster recovery checks on repairs to their existing home just to get back on their feet - they've effectively doubled down. What's needed is a more flexible approach that could be quickly deployed in the aftermath of an event to purchase/hold floodplain properties while FEMA gets its act together. We recommend that CCC present options for such an approach.

Policy G.7 directs local governments to develop a Repetitive Loss Program where a structure "*that has suffered damage and filed FEMA claims on two or more occasions during a rolling 10 year period*" would be required to be "*rezoned **over time** to less intensive uses to accommodate shoreline migration, increased coastal flooding, inundation and sea level rise impacts*."

This provision is excellent, and jurisdictions that comply with it will not only make their shores safer, but they will make themselves eligible for Hazard Mitigation Assistance grants under FEMA, potentially to remove repetitive loss structures from their floodplains. However, the provision could be significantly strengthened. It is highly likely that inundation events and sea level rise on the coast of California will occur without the need for FEMA claims, thus potentially allowing problematic development to stay in place. This can lead to public resource impacts and public costs. The policy language should be expanded beyond just FEMA claims, to include a trigger by multiple CDPs for repair and maintenance. A certain number of CDPs for flood-related repair and maintenance (possibly a "three-strikes" standard) within coastal hazard zones should trigger a sunset clause as a condition of the permit. This is important because repair and maintenance will extend the life of a structure which may result in impacts to public resources and sensitive habitat over time given the increasing dynamic changes to the coast.

There must be a CDP process that ensures seawalls and other coastal development are not impacting access to recreation and sand supply - if it is deemed that irreparable damage has occurred to access and sand supply there must be some kind of nexus or trigger for removal. The Orgaanizations support a built in 20 year incremental review condition for established thresholds.

Additionally, the words, "over time" must also be clarified in the language quoted above from policy G.7. Policy G.7 should further spell out the steps of rezoning under a specified time frame - such as General Plan updates and ordinance updates. Rezoning is an essential element of sea level rise and climate change adaptation planning and must be clearly addressed.

Policy G.9 - Managed Retreat Program establishes a mechanism to remove, modify or relocate development when necessary to protect and provide for the migrating shoreline. The Organizations strongly support the Managed Retreat Program and has several suggestions that should be incorporated in order to ensure efficacy of this vital policy.

Policy G.9c calls for the use of easements to direct future coastal development outside of high hazard areas. The use of easements is particularly important for protecting critical coastal habitats and public access to the coast. Anywhere that dedication of a lateral easement can be required to protect current public access or coastal habitats, the permitting authority should also require that that the easement rolls landward as sea level rises in order to ensure that the impact of the development is offset for the lifetime of the structure. This should be clarified in G.9c.

A rolling easement should require the ultimate removal of a structure where the easement is exacted to protect public access and environmentally sensitive habitat areas. Over time, as erosion causes the coastline to retreat, structures on an ocean-front property will come to lie right at the edge of the water. The existence of these structures can render public access to the coast impossible and/or hazardous to public safety. While coastal habitats can retreat as sea levels rise, their ability to do so is limited by the presence of man-made structures such as seawalls, roads, and structures on ocean front property. Thus, if these structures are not removed, they will make it impossible to protect important coastal habitats and public access.

Finally, The Organizations also supports policy G.9d and the recommendation to pursue funding to purchase easements and to acquire non-conforming structures. Similar programs have been successful such as the state of New York's Storm Response Buyout and Acquisition program. The Buyout Program improves the resiliency of the larger community by transforming parcels of land into wetlands, open space, or stormwater management systems, creating a natural coastal buffer to safeguard against future storms.

Funding is a mandatory part of any managed retreat and buyout program, however, putting the burden squarely on the community to "pursue funding", as recommended in policy G.9d, to support implementation of the Managed Retreat Program is insufficient. While there are a number of potential sources of funding to support such activities (see Colgan et al., 2017), the Guidance does not describe these and it would almost certainly increase enrollment in the managed retreat program option if it did. It would also be helpful if the State took it upon itself to either provide funding directly – with a dedicated, permanent funding stream – or otherwise incentivized it.

The Guidance would also benefit from language that prioritizes especially vulnerable areas in any buyout program, such as repetitive loss parcels and parcels with ESHA or enhanced ecological features. In cases where FEMA funding is available, non-FEMA entities (such as insurance or mortgage companies) could bear the initial financial burden while FEMA prepares for the ultimate buyout - thus adding an element of practicality for homeowners who have been displaced.

Existing Structures and Redevelopment

Policy F.2, Prioritization of Types of Shoreline Protection Devices, indicates that measures to protect existing structures should limit the use of coastal protection structures, such as seawalls.

However, policy F.2 does not go far enough to ensure protection of public access and public resources. Use of such protection structures should also be time-limited to the lifetime of the structure. In the current Guidance, the Commission provides some guidelines on the lifetime of existing structures for sea level rise planning purposes and generally defines residential or commercial structures as 75-100 years, “unless a project specific analysis determines otherwise.”

The Organizations applaud the Commission’s efforts to obtain covenants that new development will not require seawalls, as stated in policy F.5 - Evaluation of Existing Shoreline Armoring. These covenants alone will not be sufficient. The Commission is likely to be faced with increasing conflicts between section 30235 and section 30233’s broad prohibition on armoring. The only way to address these conflicts and remain true to the Coastal Act’s policies safeguarding environmentally sensitive habitat areas and public access is to recognize that existing structures have limited lifetimes and, where feasible, use forward planning mechanisms (such as Transfer of Development Rights systems, rolling easements, and moveable structure design approaches) to avoid de facto armoring of the coast by protecting structures in perpetuity and allowing existing and future development to become essentially permanent. Once the limited lifetime of these structures is both recognized and built into the forward planning process, meaningful sea level rise adaptation policies that protect public access and coastal habitats will be achievable if the Commission engages in a program of robust enforcement.

Policy F.5 - Evaluation of Existing Shoreline Armoring states that “*shoreline protection devices shall only be authorized until the time when the qualifying development or resources that is protected by the shoreline protective device is no longer present and/or no longer requires protection.”* Further, Policy F.6 - Shoreline Armoring Duration states that *“Shoreline protective devices shall only be authorized until the time when the existing principal structure that is protected by the device: 1.) is no longer present; 2) no longer requires armoring; or 3) is redeveloped.”*

The Guidance model policy language does not go far enough to ensure reevaluation of coastal protection structures on a time frame that is meaningful with respect to the projected impacts of sea level rise. Because of the dynamic nature of the changes that are expected, more frequent reevaluation of coastal protection structures and shorter development lifetimes for new construction are necessary if meaningful retreat that protects coastal habitats and public access is to be pursued. Section F, Building Barriers to Protect From Hazards, needs to ensure that protection devices for existing development are time limited to the life of the structure and require frequent reevaluation. In the absence of such measures for frequent reevaluation, as well as robust enforcement to ensure removal of structures that do not conform with the Coastal Act, California will adopt a de facto policy of permanent coastal development and fortification —a policy that would be in inconsistent with Chapter 3 of the Coastal Act due to its failure to balance environmental and public access concerns against private Development.

The Organizations sincerely appreciate the Coastal Commission for taking the time to review these Comments. The Commission's commitment to engage local planners and continually support local governments is necessary – and commendable. The Guidance does a great job of being substantive and providing specific recommendations for local governments. The Organizations are committed to assisting you in achieving the goals set out in the SLR Guidance, and looks forward to cooperating on actions that will collectively result in progressive planning to combat SLR and climate change impacts. We strongly support the Coastal Commission's efforts to encourage proactive planning to prepare for and respond to sea level rise.

Sincerely,

Jennifer Savage
Surfrider Foundation

Sarah G. Newkirk
The Nature Conservancy

Penny Elia

Garry Brown
Orange County Coastkeeper

Nancy Okada
Coastal Committee Co-Chair Sierra Club California

September 29, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Re: Comments to Sea Level Rise Residential Adaptation Policy Guidelines

Dear SLR Working Group:

As a long-standing coastal protection and preservation advocate, I thank you for the opportunity to submit comments on your SLR Residential Adaptation Policy Guidelines, but first want to thank you for all your hard work on this important issue and your most excellent presentation(s) at the August hearing in Calabasas.

You have done an excellent job addressing most of the major issues, but I feel there needs to be strength and clarity added to several of your guidelines given that as a few of the Commissioners commented in August, there is bound to be a lot of push back. Strength and clarity as far as permit requirements, monitoring, condition compliance, triggers for review, etc. are just a few of the areas that I hope you will revisit in an attempt to avoid the push back.

Drawing once again from Commissioner comments at the August hearing, I agree with Chair Bochco (and paraphrase her statements) that although the land and tide may fluctuate the concept of public trust doesn't change. Commissioner Brownsey also reminded staff that conflict over implementation could be a challenge and that a strong conflict resolution policy must be in place, and that it will be important to hear from visitors and users of our public beaches.

It was also noted at the August 9 hearing that policies and guidelines may not be adequate to accomplish the task at hand. Legislation may need to be implemented that will bolster these policies and guidelines, and I am confident you already have staff considering what this legislation might look like.

You will be receiving a much more detailed analysis of the policy guidelines from the environmental organizations that I am affiliated with, so I have attempted to make my comments very brief. However, I can't stress the importance of listening to and adapting the message points a few of the Commissioners delivered during the August hearing.

Again, thank you for your hard work on this important issue and the opportunity to comment.

Sincerely,

Penny Elia
Coastal Advocate

Copy: California Coastal Commission, J. Ainsworth, M. Cavalieri, M. Matella, S. Christie

Matella, Mary@Coastal

From: Robin Rudisill <wildrudi@me.com>

Sent: Friday, September 29, 2017 4:58 PM
To: ResidentialAdaptation@Coastal
Cc: robert.davis@lacity.org; Jesperson, Michelle@Coastal
Subject: comment letter for Sea Level Rise Policy Guidelines Draft
Attachments: Thatcher_Yard.pdf; Homeless_Strategy_Meeting_Com_Special_Meeting.pdf; CAO_Request_for_Authority_November16,2016.pdf; Venice_Community_Plan_Open_Space.pdf; certified_LUP_Recreation.pdf; Boat_Launch_for_Canals.pdf; Venice_Median_Project_in_Dual_Zone.pdf; Venice_Median_Project_Info.pdf; Venice_Median_Project_Lots_ZIMAS.pdf

Sea Level Rise Working Group,

Please see below for my and others' comments re. the Sea Level Rise Policy Guidelines Draft.

Your work is outstanding and very impressive!

Thank you…..

Best,
For the Love of Los Angeles
and our precious Coast,
Robin Rudisill
(310) 721-2343

I. Which Science and Who Decides

It seems that one of the most critical variables in planning for sea level rise is which scientific projection is used and who decides. There are many organizations around the world who are making projections and the underlying assumptions vary widely. I hope you will lay out the options in more detail in future guideline documents. I'm very concerned about the decisions being left with the local jurisdictions as they do not tend to want to put money towards preventing future disasters. Also, we've seen way too many situations where there has been inappropriate political interference with evidence and scientific facts. And sea level rise is such a slow-moving process that it is very easy for governments to continue to simply do nothing. That said, our public officials have a duty to effectively communicate future vulnerabilities to the public and to act on them.

We know our seas are rising, and we are certainly seeing extreme weather events, with more to follow. And we have learned that there is a danger in non-action--waiting for stronger evidence or consensus on the issue--as waiting too long could result in a situation where it is too late to do anything about the problem. Could that perhaps be what happened most recently in Houston? The fact is, if you wait for the data, it's going to be too late.

Thus, I hope that the Coastal Commission will make the guidelines and future requirements very clear and non-negotiable and that you will not leave it up to the local jurisdictions to decide whether or how to protect their coastal areas. Not only do they not have the expertise of the Commission, but their political will may not be commensurate with the task at hand.

I believe that the answer to this question could make a giant difference in how sea level rise is handled for California. One thing we do know is that the implications are catastrophic if we do not adapt.

II. Focus on Prevention

The California Coastal Commission should work with other Coastal Jurisdictions in the U.S. and internationally. Efforts to transition to clean energies from our fossil-fuel world must be prioritized with proposed legislation. We hope that the Coastal Commission makes it a priority to be a leader in that effort.

III. Responsibility and Authority Must Remain With the State

The model policy language for LCP's is well thought out. The effectiveness will depend on how much oversight the Coastal Commission will have over local governments' implementation and enforcement of the LCP regulations.

IV. Communications to the Public: More is Better

The Public needs more education and awareness on the subject. It is important to start early on (the time is now!) and it should continue. Perhaps there can be short videos distributed, or brochures, and/or a template for Town Halls in Coastal Communities.

The idea of bringing requirements into the real estate sale/purchase disclosure process is outstanding. If we had been doing that relative to Coastal Act requirements up to now, people would have a much greater understanding of the law and we would have a significantly more protected coast.

V. Recent Los Angeles City Council Decisions that Certain Coastal Parcels are Underutilized and Should be Used for Affordable and Homeless Housing Must be Reversed

A. Thatcher Yard, in the Oxford Triangle Subarea of Venice, Must be Kept intact as a Coastal Maintenance Yard

At the August 11, 2017 Coastal Commission meeting I made a request for enforcement re. the Los Angeles City Council's decision to classify a large City-owned parcel that is located in the Venice Coastal Zone as surplus/underutilized property, for use in the City's Homeless and Affordable Housing Opportunities program. This property is currently designated in the L.A. General Plan Venice Community Plan and the Certified Venice Local Coastal Program Land Use Plan as Public Facilities. This parcel does not in any way meet the definition of surplus or underutilized, and it is drastically different than all of the other City-owned properties voted as such by the City Council for this program.

Thatcher Yard is in located in the Oxford Triangle Subarea of the Venice Coastal Zone. It is zoned "Public Facilities," and it has served as a coastal maintenance yard for the surrounding beaches and other waterways. It makes no sense to reduce such facilities in the Coastal Zone, in an area near the beach, canals and marina, that is in the Tsunami Zone and the Flood Zone, and in the face of sea level rising and global warming.

As the guidelines say, the State has a duty to exercise continuous supervision and control over the waters of the state and the lands underlying those waters and must consider the effects projects will have on the very interests protected by the public trust, and must avoid or minimize harm to them.

This is valuable property, currently designated as Public Facilities for maintenance of our beaches and surrounding waterways, which is an important coastal zone-related use. This property is most definitely not surplus or under-utilized.

In addition, the City's Public Facilities zones are to be used for our future needed public facilities, including for fire, police, parks, beaches and other waterways. This land is essentially protected by our General Plan and coastal land use plan in order to assure sufficient ability of the City to respond to the /city's public and coastal needs.

We have asked for evidence that the Public Facilities at Thatcher Yard is no longer needed and none has been provided. A complete lack of any need, current OR FUTURE, must be proven before eliminating such important public facilities.

We believe that if a proper review is done, especially with the implications of sea level rise in mind, it will be quite clear that these much-needed coastal facilities must not be eliminated.

Here are a two maps showing the area and its zoning:

It isn't right that the City Council can unilaterally make a decision to designate Coastal Zone property used as coastal-related Public Facilities as available for its housing programs. As a result of its designation of the property as surplus, numerous agencies/developers have spent significant money on a bidding process and subsequent detailed proposal and community outreach. Apparently our Councilman is just assuming that the related L.A. General Plan and Certified Venice Land Use Plan amendments and zoning changes are a done deal. There is no mention of whether this proposal is in conformance with the Certified Venice Land Use Plan (it is not) or that amendments to it would be required, which is a major issue as it would prejudice our ability to prepare a LCP that is in conformance with the Coastal Act Chapter 3.

By the City moving ahead with this project and the bidding process, under the assumption that the related significant approvals will be obtained, it is significantly prejudicing the outcome of those approvals, as there will be even more pressure on the decision makers to the extent significant City and developer money has been spent towards the proposals and developer expectations have been created.

Many in the surrounding neighborhood are seriously concerned because they did not have a public process on this very significant decision by the City Council to select this parcel for their program. Opposition groups have been formed, lawyers have been hired and significant fundraising is being done to fight what I believe is not even a legal decision at its very genesis. This non-stop attack on and abuse of the Venice community needs to stop.

Also, needless to say, in addition to an amendment to the Certified Venice Land Use Plan being a significant prejudicing of the future Venice LCP, the idea of the removal of a coastal zone Public Facility beach, marina and canals maintenance yard in the Venice Coastal Zone is beyond the pale…..

The Councilman (Bonin) has also said that if the Community doesn't like the project the developer is proposing, he'll just sell the land to a developer to build market rate housing and use the money to build homeless housing elsewhere. This kind of talk is also outrageous and must be nipped in the bud. As you know, this is the very attitude that caused the need for the Coastal Act.

This misguided City decision MUST be reversed and we the citizens request enforcement and/or involvement by the Coastal Commission to reverse it. The City could use training on proper process for and uses of our Coastal Zone areas of the City of L.A. Venice has significant land use trauma and drama already, and citizens are constantly fighting the "hostile takeover" of aggressive and politically connected developers and investor groups.

We beg you to **please take care of this problem as quickly as possible so that the citizens are not forced to be the ones responsible for ensuring that the Coastal Act and related City laws are honored in this regard.**

See "City Council Documents" in B. below for reference to the Thatcher Yard being used for a PSH project.

B. The Venice Blvd. Median Strip, between Dell and Pacific, Must be Kept as Open Space

Please see recent email to Staff in this regard, below. It would clearly be a huge mistake to embark on such a project, in the very area where commercial and/or Public Facilities may need to be relocated due to sea level rise, and also in an area clearly very exposed to Sea Level Rise as it is one block from the beach and adjacent to the Venice Canals.

> Begin forwarded message:
>
> **From:** Robin Rudisill <wildrudi@me.com>
> **Subject: REQUEST FOR ENFORCEMENT--L.A. City Council's decision to use Dual Permit Jurisdiction Coastal Zone Open Space for City housing project**
> **Date:** August 27, 2017 at 9:19:16 PM PDT
> **To:** "Ainsworth, John@Coastal" <John.Ainsworth@coastal.ca.gov>
> **Cc:** dayna.bochco@coastal.ca.gov, Effie.Turnbull-Sanders@coastal.ca.gov, "Lisa@Coastal Haage" <Lisa.Haage@coastal.ca.gov>, Steve Hudson <Steve.Hudson@coastal.ca.gov>, "Pederson, Chris@Coastal" <Chris.Pederson@coastal.ca.gov>, "Chalmers, Erin@Coastal" <Erin.Chalmers@coastal.ca.gov>, "Henry, Teresa@Coastal" <Teresa.Henry@coastal.ca.gov>, "Posner, Chuck@Coastal" <Chuck.Posner@coastal.ca.gov>, "Vaughn, Shannon@Coastal" <Shannon.Vaughn@coastal.ca.gov>, "Rehm, Zach@Coastal" <Zach.Rehm@coastal.ca.gov>, "Andrew@Coastal Willis" <Andrew.Willis@coastal.ca.gov>, "Sanchez, Jordan@Coastal" <Jordan.Sanchez@coastal.ca.gov>
>
> REQUEST FOR ENFORCEMENT
>
> Dear Jack,

At the August 11, 2017 meeting I made a request for enforcement re. the Los Angeles City Council's decision to classify a large City-owned parcel that is located in the Dual Permit Jurisdiction Coastal Zone (and currently designated in the L.A. General Plan Venice Community Plan and the Certified Venice Land Use Plan as Open Space) as surplus/underutilized property, for use in the City's Homeless and Affordable Housing Opportunities program. This parcel does not in any way meet the definition of surplus or underutilized, and it is drastically different than all of the other City-owned properties voted as such by the City Council for this program.

The parcel is on the median strip of Venice Blvd, between Dell and Pacific. It is currently used for beach parking and the Venice Canals boat ramp and launch, which the City claims it will replace.

I do not believe that the City Council can unilaterally make a decision to designate Dual Permit Jurisdiction Coastal Zone, Open Space property as available for its programs, on which numerous agencies/developers have spent significant money on a bidding process and subsequent detailed proposal and community outreach. Apparently our Councilman is just assuming that the related L.A. General Plan and Certified Venice Land Use Plan amendments and zoning changes are a done deal and there have been significant expenditures by many parties towards this end. There is no mention of whether this proposal is in conformance with the Certified Venice Land Use Plan (it is not) or that amendments to it would be required, which is a major issue as it would prejudice our ability to prepare a LCP that is in conformance with the Coastal Act Chapter 3.

Many of the surrounding neighborhoods are in an uproar because they didn't get to have a public process on this very significant decision by the City Council to select this parcel for their program. Opposition groups have been formed, lawyers have been hired and significant fundraising is being done to fight what I believe is not even a legal decision at its very genesis. This abuse of the Venice community needs to stop. I hope that you can nip this in the bud and save a huge fight and significant expense for all.

Also, needless to say, in addition to an amendment to the Certified Venice Land Use Plan being a significant prejudicing of the future Venice LCP, the idea of the removal of Open Space in the Dual Permit Jurisdiction Coastal Zone is beyond the pale…..the L.A. General Plan Venice Community Plan and the Certified Venice Land Use Plan speak only of increasing Open Space and visitor-serving uses, where feasible.

The Councilman (Bonin) has also said that if the Community doesn't like the project the developer is proposing, he'll just sell the land to a developer to build market rate housing and use the money to build homeless housing elsewhere. This kind of talk is also outrageous and must be nipped in the bud. As you know, this is the very attitude that caused the need for the Coastal Act.

As you will see in reviewing the details, there are many other serious issues, including the sheer size—mass and scale—of the proposed project, as well as the co-mingling of investor interests.

The location is on the median strip of Venice Blvd, in the center of Venice's tourist area, 1 block back from the beach/boardwalk. Apparently they intend to replace the visitor-serving parking on the site, but I'm not sure how they intend to allow for an effective boat ramp and launch for the Canals or what they plan to do for the tourist parking during construction. Also, adding a significant residential development of any kind at this location will significantly intensify the already extreme traffic congestion, at a location that is truly the "gateway" and main

thoroughfare for tourists into Venice, which will have a significant adverse impact on “access" to the coast.

I request enforcement by the Coastal Commission to reverse this City decision and also that you educate the City on the state’s jurisdiction over the dual zone as well as proper process for and uses of our Coastal Zone areas of the City of L.A. Venice has significant land use trauma and drama already, and so I beg you to **please take care of this problem as quickly as possible so that the citizens are not forced to be responsible for ensuring that the Coastal Act and related City laws are honored in this regard.**

Attached are just a few pertinent documents with information about the City’s decision, to give you a sense for what is going on. Please let me know what other information you may need.

City Council Documents:

L.A. General Plan Venice Community Plan:

LAMC:

SEC. 12.04.05. "OS" OPEN SPACE ZONE.

(Added by Ord. No. 166,168, Eff. 10/3/90.)

The following regulations shall apply in the "**OS**" Open Space Zone:

A. Purpose. It is the purpose of the "**OS**" Open Space Zone to provide regulations for publicly c land in order to implement the City's adopted General Plan, including the recreation, parks and open designations in the City's adopted district and community plans, and other relevant elements, includi Open Space, Conservation and Public Recreation Elements. Implementation of the General Plan will to protect and preserve natural resources and natural features of the environment; to provide ou recreation opportunities and advance the public health and welfare; to enhance environmental quali encourage the management of public lands in a manner which protects environmental characteristics; a encourage the maintenance of open pace uses on all publicly owned park and recreation land, and space public land which is essentially unimproved.

B. Use. The following regulations hall apply to publicly owned land classified in the "**OS**" Open Zone: no building, structure or land shall be used and no building or structure shall be erected, moved the site, structurally altered, enlarged or maintained, except for the following uses:

1. The following uses and activities when conducted in accordance with the limitations her specified.

(a) **Types of Uses.**

(i) Parks and recreation facilities, including: bicycle trails, equestrian walking trails, nature trails, park land/lawn areas, childrens' play areas, child facilities, picnic facilities, and athletic fields (not to exceed 200 seats in park) us park and recreation purposes. **(Amended by Ord. No. 176,545, Eff. 5/2/05.)**

(ii) Natural resource preserves for the managed production of resources, inclu but not limited to, forest lands, waterways and watersheds used for comm fisheries; agricultural lands used for food and plant production; areas conta major mineral deposits ("G" Surface Mining Districts) and other similar uses.

(iii) Marine and ecological preserves, sanctuaries and habitat protection sites.

(iv) Sanitary landfill sites which have received certificates of closu compliance with federal and state regulations.

(v) Public water supply reservoirs (uncovered) and accessory uses whic incidental to the operation and continued maintenance of such reservoirs.

(vi) Water conservation areas, including percolation basins and flood plain ar

(b) **Limitations**: **(Amended by Ord. No. 169,013, Eff. 9/28/93.)**

(1) **(Amended by Ord. No. 173,492, Eff. 10/10/00.)** The use may not be lo on land which includes a lake, river, or stream or which is designated by the C

Excerpts from the Certified Venice Land Use Plan regarding Open Space and Recreation/Visitor-Serving areas

As you know, the Certified Venice Land Use Plan indicates that affordable housing (together with increased public parking) IS a priority use at the former MTA site on Main Street. It is unclear why that site was not selected instead:

Policy I. C. 7. Bus Yard Redevelopment. Should the site become available, priority uses for the future redevelopment of the former MTA (formerly Southern California Rapid Transit District (RTD)) bus service maintenance and storage facility, located on Main Street, between Sunset Avenue and Thornton Place, include affordable housing, which may be a mixed-use residential-commercial project, and public parking structure as a measure to improve public access.

Other Project Info:

Option A Overview

Option B Overview

If you also need a petition or any type of clear indication of widespread community concern re. this request for enforcement, I can get you hundreds of signatures on very short notice.

I would very much appreciate the opportunity to meet with you to provide more details on this matter.

Thank you for your strong leadership Jack……we deeply appreciate your commitment to the California Coast.

For the Love of Los Angeles
and our precious Coast,
Robin Rudisill
(310) 721-2343

County of Santa Barbara

Planning and Development

Glenn S. Russell, Ph.D., Director
Dianne Black, Assistant Director

September 29, 2017

California Coastal Commission
c/o Sea Level Rise Working Group
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Email: ResidentialAdaptation@coastal.ca.gov

RE: Draft Residential Adaptation Policy Guidelines

Dear Sea Level Rise Working Group:

The Santa Barbara County Planning and Development Department (P&D) appreciates the opportunity to provide comments on the Draft Residential Adaptation Policy Guidelines. We have begun public outreach and policy development for our Coastal Resiliency Project, so the release of the draft Guidance is timely and helpful for us.

We have provided comments below on six topics, and ordered them in roughly the same order they appear in the model policies. Our comments are not inclusive of all feedback we may have but cover main concerns and recommendations that we have on the Guidance document.

Identifying Planning Horizons (Model Policy A.2)

Please provide the background sources or other data/information used to determine the "anticipated duration" of residential development. Also, residential structures should also include manufactured homes, which may have a shorter "duration."

Sea Level Rise Projections (Model Policy A.3)

When the Guidance talks about using Best Available Science and analyzing "high" projections of sea level rise to plan for coastal hazards, please note or clarify that the high projections are not the only projection that may be used in adopted policies and when permitting development.

Depending upon the anticipated lifespan of a new development and site-specific conditions, a medium scenario may be applicable for project design purposes, with the development permit conditioned such that if the high scenario occurs, structural repair/retreat would occur. This would coincide with the statement on page 11 that "these types of policies apportion risk over time and allow for the use of adaptations closer to the time they are needed, rather than building now for the worst case future condition."

Hazard Reports (Model Policies A.4-A.5)

Model policy A.4 would require the preparation of a coastal hazard report, prepared by a licensed civil engineer with expertise in coastal engineering and geomorphology, for all "new development in areas potentially subject to coastal hazards." Policy A.5 provides detail regarding what the reports should contain. The reports are warranted for proposed new development right along the coastline, and in areas subject to foreseeable flooding during the life of the development due to specific site considerations.

However, due in part to the uncertain extent of sea level rise through the end of this century, coastal hazard maps are often generated using a "worst case" scenario. This worst-case scenario models high sea level rise amounts, plus high tide, an extreme storm event, and wave runup 83 years from now. The maps often do not take into consideration existing coastal armoring, existing development that would impede storm surge or extreme high tides (such as existing roads/freeways), and other site-specific considerations. As a result, the coastal hazards can extend far inland in some cases.

Therefore, applying this policy could then pose an undue expense to property owners not adjacent to the coast. They would be required to prepare an expensive report when a much simpler site visit and/or questionnaire process would suffice. If a questionnaire or flow chart process was developed as part of the Commission's Guidance, it would be very helpful to local agencies. The questionnaire or flow chart would guide property owners/developers and local planners, to understand when a coastal hazard report is needed, and when it would be an unfair burden to more inland development and a site visit and documentation of local conditions would suffice.

Redevelopment (Model Policy B.7)

We have many concerns with the new "redevelopment" definition and related policies. The definition of "redevelopment" as proposed in the Guidance is not found within the Coastal Act or its Administrative Regulations. Please ensure that any new "redevelopment" definition does not disincentivize or preclude managed retreat and adaptive design options, and does not prevent existing property owners from safely repairing and maintaining their current properties. The "redevelopment" definition and policies should also not preclude rebuilding after damage or a disaster unrelated to sea level rise (e.g. earthquake, tsunami). Additionally, for consistency, the definition of "redevelopment" shouldn't be at odds with the exemptions from the use of "new

development" in Section 30212, and other Coastal Act exemptions for improvements to existing single-family residences.

One method of managed retreat used in the Isla Vista area of Santa Barbara County is that bluff-top property owners can be required to "cut back" their buildings if the bluff edge retreats to within 15 feet of the building foundation. Model policy B.7 should be revised to ensure that bluff-top development that is required to "cut back" is not classified as "redevelopment" if no other improvements/alterations are being made to the building. Requiring that the entire development conform to current day Coastal Act and LCP policies could result in the loss of affordable coastal residential development and accommodations.

Migration of Development onto Public Trust Lands (Model Policy D.1)

In Policy D.1 (Removal Conditions / Development Duration) it is unclear how the local city/county could require removal of development that is entirely on public trust lands. It is recommended that this policy be modified to propose triggers for removal of development before it is located partially or entirely on public trust lands.

Trigger policy examples (Model policies G.7-G.9)

The trigger policy examples (G.7-G.9) provide some policy options for managed retreat and repetitive loss. However, there are other types of triggers and managed retreat policy options that would be helpful to explore and provide. For example, model policy G.9 would require that development adjacent to the beach must be moved, modified, or removed once a minimum beach width is achieved. Related trigger policies targeting the following situations would also be helpful:

- Triggers for managed retreat along bluff-backed coastline (due to bluff erosion)
- Triggers for managed retreat due to flooding (relating to Figure 3 in the Guidance)
- Triggers for managed retreat due to the inland movement of public trust lands (before the development is located entirely on public trust lands, as specified in model policy D.1)
- Options for landowners and local agencies that don't require the local agency to acquire additional risk by purchasing or taking over the property
- Monitoring/reporting options so that local agencies know when triggers have been reached (not necessarily relying on property owners to self-report)

In addition, it would be very helpful if Figure 3 (Hypothetical example of adaptation pathway) was expanded into figures showing example "triggers" for coastal hazards on each of the shore development typologies discussed in the document (e.g. flooding or erosion triggers for urban blufftop areas, flooding triggers for low density estuary, etc.).

Thank you for the opportunity to comment on the draft Residential Adaptation Policy Guidance. If you should have any further questions, please do not hesitate to contact my office directly, or Dan Klemann, Deputy Director of Long Range Planning, at (805) 568-2072.

Sincerely,

Glenn S. Russell, Ph.D., Director
Planning and Development Department

Cc: Dan Klemann, Deputy Director, Long Range Planning
Mindy Fogg, Supervising Planner, Long Range Planning
Selena Evilsizor, Planner, Long Range Planning

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Matella, Mary@Coastal

From: jt@judytaylor.com
Sent: Friday, September 29, 2017 3:29 PM
To: ResidentialAdaptation@Coastal
Subject: Residential Adaptation Policy

Judy Taylor would like information about:
Residential Adaptation Policy Guidance

As a 40 year Realtor and 43 year San Mateo County Coastside, i fully support the comments by Jeri Garrick, California Association of Realtors Legislative Advocate.
1) Changing the date of existing structure to prior to January 1, 1977 would be wrong on many levels. It is a dramatic change in policy that plays gotcha with folks and that erodes faith in government and is grossly unfair. It will lead to unnecessary litigation, burning up dollars and energy best spent in other endeavors. Please remove that provision.
2)GIS data should be used for all mapping.
3) Local jurisdictions need to provide the disclosure information, not individual real estate agents or property owners, and that information needs to be easily accessible.
4) Redevelopment needs to exclude and non-conforming needs to allow maintenance and repairs and work such as new windows, solar, retrofitting plumbing, etc. Managed Retreat program participation should not be required in the same situations.
5) If a CDP applicant can provide site specific evidence that the general data, maps, overlays, etc., do not apply or general restrictions are not warranted, that site specific data may be used to allow the CDP. General data, big maps and overlays, often include properties that may not require the same protections as the maps and overlays would indicate. In such cases, flexibility in favor of the applicant needs to be allowed.
6) As a Realtor, I am concerned about how a community of property owners will be "put on notice if their parcels are subject to current or future coastal hazards on the Coastal hazard maps." Will this be an affirmative requirement on the art of the city or county? Will it be a post card? Not known until a permit is applied for?
7) Where development would be better if variances were allowed, further from a buffer if closer to the property line, those variances will be supported. I can't tell you how may ties the property owner, neighbors, community and environment would have been made better with a variance here and there.
8) With the 50% rule for redevelopment, an allowance needs to be made for unpreventable cost overruns. When opening up an old building, no matter how well researched and planned, ugly surprises happen. If a Prouty owner could not have known and there is an unintended expense that causes an exceeding of the threshold, the property owner should be allowed to be a redevelopment and not a replacement. In that same vein, improvements that "extend the anticipated duration of the development in a non-conforming location" should not be automatically and categorically prohibited. There are many situations where repairs simply cannot be made that would not extend the duration simply because many modern products have long shelf lives. If a building has 15 years remaining, you won't find a window that won't extend the duration of the development.
9) With land divisions, there will be situations where denial of a permit would not be legally permitted, i.e. would be a takings. I have had situations where that would have been the case, where the property owner/s would have reconfigured the properties so that the new configuration would have been environmentally superior but they were prohibited from doing so due to a similar prohibition. These situations will need a case by case review and there should not be these blanket prohibitions. Require that certain findings have to be made but do not outright prohibit.
10) As to the contingency funds, what will that look like over time? When a property sells, how will the new owner be "approved"? This provision needs to be fleshed out with real estate and insurance/bonding input.

Thank you for the opportunity to make comments.
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