**CALIFORNIA COASTAL COMMISSION**
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# W6e

## CRITICAL INFRASTRUCTURE SLR PLANNING GUIDANCE

## NOVEMBER 17, 2021

## CORRESPONDENCE

November 12, 2021

To: Steve Padilla, Chair, California Coastal Commission

CC: Jack Ainsworth, Executive Director, California Coastal Commission
Madeline Cavalieri, Statewide Planning Manager, California Coastal Commission
Kelsey Ducklow, Environmental Scientist, California Coastal Commission

**Re: Item W6E Critical Infrastructure at Risk – Need to Define Seawater Desalination Facilities as Critical Water Infrastructure**

Dear Chair Padilla and Commissioners,

As outlined in our extensive September 24th comment letter, the undersigned organizations remain concerned that the Commission has inappropriately failed to explicitly include seawater desalination facilities as critical water infrastructure in the November 2021 revised draft *Critical Infrastructure at Risk, Sea Level Rise Planning Guidance for California's Coastal Zone* (Revised Guidance). This exclusion, if allowed to remain, will set a dangerous precedent for future desalination facilities along the coast that if approved and constructed will play a critical role in providing a portion of a community's future water supply. While we believe these facilities should be a last resort option given their harmful long-term impacts to our marine resources and climate, we nonetheless recognize that any effort to identify them as non-critical infrastructure serves to benefit not the public or the environment, but the applicant(s) who may seek to construct these facilities to a lower standard despite their proposed longevity (e.g. 50 years) in the face of aggressive climate change.

The first reference to this ill-advised omission occurs in the Executive Summary where staff states that "the goal of the guidance is to promote resilient coastal infrastructure and protection of coastal resources by providing […] policy and planning information to help inform sea level rise adaptation decisions that are consistent with the Coastal Act." The Summary goes on to state that "The Guidance addresses two main types of critical infrastructure

transportation and water." Yet, in the very next sentence staff states "While other infrastructure types, including power plants, gas pipelines, and desalination facilities are not explicitly addressed, many described adaptation approaches could broadly apply to these types of infrastructure as well." While the Guidance was clearly not intended to address energy facilities like power plants and gas pipelines, it clearly was intended to address critical water infrastructure and it is illogical not to include seawater desalination facilities as critical water infrastructure facilities.

Later, in Chapter 6, Water Infrastructure, the Guidance states, "Although desalination facilities are located in the coastal zone, they are not covered in this Guidance due to the unique and complex issues associated with such facilities." We would argue that future desalination facilities face the same siting and vulnerability issues as other existing and future coastal water infrastructure such as stormwater capture and treatment and wastewater treatment facilities, etc. that must be addressed in future planning for sea level rise and climate change. It is precisely because seawater desalination facilities are generally located in the coastal zone and subject to the same sea level rise concerns as other critical industrial facilities, that the Commission must instruct local governments and other decisionmakers to consider them critical water infrastructure.

In response to comments, the staff report also states that desalination is not discussed due to limited timing and staff capacity. This is an inadequate response, especially in light of key controversial proposals in Monterey Bay and Huntington Beach pending in the near future for Coastal Commission hearings. The decisions we make about the siting and design of desalination facilities today will play a major role in the state's adaptive capacity to sea level rise – poorly sited desalination plants have the potential to lock communities into industrial patterns of development along the coast that will prevent effective and equitable sea level rise adaptation.

As such, we request the following key modifications to the Revised Guidance before the Commission approves and finalizes the document.

1. **Define seawater desalination facilities as critical water infrastructure**

The Revised Guidance should remove all references to the exclusion of seawater desalination facilities and make clear that these facilities are subject to the same principles as outlined for other critical water infrastructure facilities located in the coastal zone. This will provide valuable guidance to local planners and decisionmakers who must make siting and design decisions that can ensure that a facility, once built, can operate as necessary well beyond 2050; most seawater desalination facilities, including the Poseidon Huntington Beach project depict an operating life of 50 years as confirmed by the Regional Water Board Permit approved in April 2021.

2. **Provide specific guidance on desalination facilities as critical infrastructure.**

The Revised Guidance should clearly state in Chapter 1 that critical water supply infrastructure, such as seawater desalination, should be evaluated, sited and designed to avoid hazards associated with the H++ sea level rise flood zone for the duration of its useful lifetime. This is a key precaution to avoid service disruption due to impacts from sea level rise and related coastal hazards to the facility, the distribution structures and surrounding supporting infrastructure such as access roads and electricity.

Chapter 6, Water Infrastructure, should include guidance on seawater desalination specifically. We suggest the following language:

> Where seawater desalination is necessary (i.e., as a supply option of last resort), and/or where a Regional Water Board has deemed a project needed and approved it, such that it is pursued instead of or before less impactful and less expensive alternatives, the project should be considered a "high consequence project", as described in the Ocean Protection Council's 2018 Sea Level Rise Guidance (OPC 2018). Water supply is especially critical and high consequence with public health and safety depending on reliable sources of water supply. This is particularly true where a project is approved on the understanding that it will provide emergency water supplies. Such a project has a low tolerance for risk. Accordingly, desalination projects should be evaluated, sited and designed according to the H++ scenario described under the OPC 2018 guidance.
>
> Precautionary siting and design of critical water supply infrastructure to ensure water reliability is fundamental to the California's Human Right to Water commitment. Due to the potential for low adaptive capacity, high public cost for relocation and critical water supply service disruptions, siting and design of water supply infrastructure in accordance with the H++ scenario is a key consideration to comply with the Human Right to Water commitment.
>
> The resiliency of interdependent public utilities and supporting infrastructure when evaluating critical projects is also a key consideration as sea levels rise. New facilities should not be permitted in hazardous locations where surrounding supporting infrastructure such as roadways and utilities will be damaged by coastal hazards in accordance with the H++ scenario.

3. **The Revised Guidance should clarify that the absence of explicit detail on desalination facilities does not imply they are not considered critical infrastructure.**

While we believe the Commission's Guidance document implicitly recognizes desalination facilities as "critical infrastructure" subject to the H++ scenario (e.g., p. 18), we encourage the Guidance to be revised to explicitly recognize this. Existing desalination plants have been recognized as critical facilities. For example, Carlsbad Poseidon's desalination facility in Carlsbad– which, like its proposed Huntington Beach project, is a private facility providing water to public water districts – is considered a "critical" facility by the San Diego County Water

Authority,[1] by the County of San Diego,[2] and is described as such by Poseidon.[3] Please see the attached news release.

Chapter 1 should clarify that the Revised Guidance does not explicitly exclude desalination facilities as critical infrastructure.

Thank you for your consideration of our concerns.

Sincerely,

Susan Jordan
Executive Director
California Coastal Protection Network

Andrea León-Grossmann
Director of Climate Action
Azul

Mandy Sackett
California Policy Coordinator
Surfrider Foundation

Emily Parker
Coastal and Marine Scientist
Heal the Bay

Alejandro Sobrera Barboza
Campaign Coordinator
Sunrise Movement

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[1] SDCWA's 2019-2023 Business Plan and Fact Sheet – Overview [n.d.]. identifies the facility as a critical local water resource.
[2] 2017 San Diego County Multi-Jurisdictional Hazard Mitigation Plan, and as defined in the County's April 2013 Integrated Floodplain Management Planning, which defines a "critical facility" as including both public and private potable water facilities.
[3] See Poseidon March 18, 2020 press release titled "Carlsbad Desalination Plant Staff Take Extraordinary Step to Shelter in Place to Ensure Operational Continuity at Critical Facility," in which the facility manager describes it as a "critical regional facility."

Livia Borak
Legal Director
Coastal Environmental Rights Foundation

Garry Brown
Executive Director
Orange County Coastkeeper

Elizabeth Lambe
Executive Director
Los Cerritos Wetlands Land Trust

Andrew Johnson
California Representative
Defenders of Wildlife

Pam Heatherington
Executive Director
Eco San Diego

Dave Hamilton
President
Residents for Responsible Desalination

# Carlsbad Desalination Plant Staff Take Extraordinary Step to Shelter in Place to Ensure Operational Continuity at Critical Facility

Team of mission-critical employees proactively lock in at Carlsbad plant to ensure continued production of a safe water supply

NEWS PROVIDED BY
**Poseidon Water →**
Mar 18, 2020, 19:40 ET



CARLSBAD, Calif., March 18, 2020 /PRNewswire/ -- The following is a statement from Poseidon Water, manager of the Claude "Bud" Lewis Carlsbad Desalination Plant.

"As manager of the Claude "Bud" Lewis Carlsbad Desalination Plant in San Diego County, our top priority is to ensure the health and safety of the employees and compliance with stringent state and federal standards for the production of a safe and healthy drinking water supply. With the COVID-19 pandemic, we are taking extraordinary steps to ensure there is uninterrupted production and delivery of safe and reliable water for San Diego County. In response to the rapidly evolving situation, we have been working with our Plant Operator (IDE Americas Inc.) to assemble a team of mission-critical employees to shelter in place at the Carlsbad plant. The team members, each of whom have voluntarily agreed to shelter in place, will be charged with ensuring continued water supply production and overseeing this critical regional facility, which has provided San Diego County with more than 62 billion gallons of high-quality drinking water in its 4.5 years of operation. The volunteer team members will live on site starting March 19, 2020 and isolate themselves at the facility for the next 21 days to maintain plant operations and avoid personnel exposure. These volunteers will be working in two different shifts throughout each 24-hour period to handle all operations and maintenance needs.

These are unprecedented times, and the decision to have a team shelter in place at the Carlsbad Desalination Plant was not made lightly. However, we believe it is a necessary precaution and prudent safety measure to help ensure the uninterrupted delivery of a safe and reliable drinking water supply. The on-site team will sustain plant operations and maintenance for the duration of the 21-day shelter in place period to ensure continued production of high-quality drinking water, in compliance with all state and federal drinking water standards. Throughout its isolation, the team will receive supplies, including food and other perishable items, via daily no-contact deliveries.

While the on-site team shelters in place, a second team is remaining in isolation at home and fully prepared to take over plant operations should any situation arise that would necessitate a change in staffing or if the COVID-19 threat extends beyond 21 days. Poseidon Water is working in close coordination with the San Diego County Water Authority, IDE Americas Inc. and the California State Water Resources Control Board Division of Drinking Water and will continue to evaluate the situation and take any necessary steps to ensure uninterrupted production and delivery of safe drinking water from the Carlsbad Desalination Plant."

Contact: Jessica Jones
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SOURCE Poseidon Water

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**From:** Ann Dorsey <aedorsey@hotmail.com>
**Sent:** Sunday, November 14, 2021 9:10 PM
**To:** ExecutiveStaff@Coastal <ExecutiveStaff@coastal.ca.gov>
**Subject:** Public Comment on November 2021 - General Public Comment

California Coastal Commission,

There are many aspects of the plan to regulate critical infrastructure that are well thought out. I am concerned, though, that the plan does not include seawater desalinization plants. The proposed Poseidon desalination plant in Huntington Beach would be built in low-lying tidelands and would be impacted by sea-level rise. The cost to retrofit such a facility would be considerable, which raises the question of who would pay for retrofit. It would be far better to include seawater desalination plants to the H++ sea level rise scenario so they would be evaluated, planed, sited and designed before they are constructed.

I urge the commission to include seawater desalinization plants in the Critical Infrastructure General Plan as well as consider the environmental justice impacts on the communities affected by such facilities.

Thank you,

Ann Dorsey
Northridge, CA 91325

**California Department of Transportation**

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September 24, 2021

California Coastal Commission
Statewide Planning Division
455 Market St., Suite 300
San Francisco, CA 94105

Dear California Coastal Commission:

Thank you for the opportunity to comment on the Public Review Draft of the *Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone* (Draft Guidance). The California Department of Transportation (Caltrans) and the California Coastal Commission (Commission) have a long history of working together effectively to protect coastal resources and provide safe multi-modal transportation and access to California's coastline, including collaboration on sea level rise adaptation in project planning and delivery.

In our following comments, we would like to highlight synergies between the Draft Guidance and Caltrans' 2020-2024 Strategic Plan; the magnitude of adaptation costs and implementation opportunities with the Climate Action Plan for Transportation Infrastructure (CAPTI); and several specific recommendations to enhance the Draft Guidance.

Adopted in January 2021, it is a goal of Caltrans' 2020-2024 Strategic Plan to "Lead Climate Action"—this commitment includes strategies to develop a Climate Action Program that will work with the State's most vulnerable communities to increase resilience of the transportation system to climate change impacts which includes sea level rise (SLR). The Commission's Draft Guidance offers a valuable, timely SLR adaptation framework specific to the transportation system, including rail, on adaptation strategies and model policies for local governments to consider that the transportation system operates within, and will by extension, be useful for Caltrans' Climate Action Program.

Importantly, as noted throughout the Draft Guidance, the costs of infrastructure adaptation are enormous and funding levels are currently inadequate at state and local levels. A recent Caltrans' plan set rough, preliminary transportation adaptation costs in 2030 to range from $9 to $11 billion and costs for 2100 projected to be as much as $45 billion in current dollar construction costs (Draft SHSMP 2021). Additional right of

way, maintenance expenses, mitigation costs, and other related requirements will increase those estimates substantially. As the transportation system operates within the context of local communities, it is also useful to consider statewide estimates that $150 billion in property is at risk of flooding from SLR by 2100, and it could cost the San Francisco Bay Area $450 billion to be resilient to 6.6 feet of SLR. Given this background, it is important to acknowledge synergies between the recently adopted Climate Action Plan for Transportation Infrastructure (CAPTI) and the Draft Guidance.

Core concepts like a "whole corridor approach", phasing, and avoiding coastal squeeze will be useful for Caltrans as the Department joins the California State Transportation Agency (CalSTA) in collectively implementing the CAPTI. For example, model policies for *new* transportation infrastructure promotes the avoidance of areas where sea level rise will affect the infrastructure over its expected service life. For transportation infrastructure that is *already established*, the policies generally promote a "phased" or "adaptation pathways" approach which recognizes that adaptation options will need to change over time to account for planning timelines, changing conditions, and uncertainty. In general, the model policies prioritize planning for relocation of the infrastructure to safe areas or elevation to avoid the need for hard shoreline protection that harms coastal resources. This prioritization framework—building upon useful explanations of best available science and case studies on planning for the H++ SLR scenario—will be useful for CAPTI implementation to consider as efforts to assess climate risk (Goal 6) and protect natural and working lands (Goal 10) move forward (ie *Action 5.1 Develop Climate Risk Assessment Planning and Implementation Guidance and Action*, *Action 4.3 Update the 2023 State Highway System Management Plan (SHSMP) to Meaningfully Advance CAPTI Investment Framework*). With respect to adaptation costs, the Commission's collection of studies and research describing the cost savings of associated with planning ahead and avoiding hazards will be particularly useful (Chapter 4 and Appendix G of the Draft Guidance).

Building on these shared synergies characterized within the Draft Guidance, Caltrans has the following specific suggestions:

- Page 17: Suggest inclusion end of first paragraph, "Furthermore, this guidance can also be used to inform corridor, regional, and local plans."
- Page 23, Box 1: difficult to read information source, suggest caption: Gleason Beach Highway 1 Roadway Realignment Project (November 2020), CDP 2-20-0282 Staff Report: https://documents.coastal.ca.gov/reports/2020/11/F10a/F10a-11-2020-report.pdf
- Page 25: CoSMoS is the commonly used abbreviation for the Coastal Storm Modeling System

- Page 25: Suggest caveat that while 2100 is a common planning horizon, for critical infrastructure that would be built later on in the century – the subsequent expected service life and matching time-horizon and scenario should adjust. For example, if a critical infrastructure project is programmed for construction in 2040 with a design-life of 80-90 years, should consider overall risk associated with year 2130.
- Page 27: check spelling on Mendocino
- Page 29: Figure 2: Suggest retitling second box is to "Federal and Other State Agencies"
- Page 30: Consider inserting "including assessment and identification of Climate Change/Sea Level Rise in Caltrans' multimodal corridor plans"
- Page 31: Consider replacing "State and Regional Water Resources Control Boards (Water Boards)…" with "State Water Resources Control Board and Regional Water Quality Control Boards (Water Boards)…" to be consistent with Ch 6 (page 106)
- Page 32: Update reference and footnote to acknowledge the Adaptation Priority Reports have been completed and are available here: https://dot.ca.gov/programs/transportation-planning/2020-adapation-priorities-reports
- Page 54: Consider clarifying pollution burden, ie "air pollution"
- Page 57: Suggest identification of Piedras Blancas as example of a good phased adaptation project in set of Case Studies provided in Appendix E.
- Page 60: Suggest inclusion of the following for second paragraph from the bottom, "Furthermore, seawalls do not address sub-surface SLR issues, such as flooding caused by rising groundwater tables which is and will continue to undermine critical infrastructure (Befus et al 2020)."
- Page 64: Suggest include EO N-82-20 as it obligates state agencies to prioritize and accelerate use of natural infrastructure solutions: https://www.gov.ca.gov/wp-content/uploads/2020/10/10.07.2020-EO-N-82-20-signed.pdf
- Page 70: Suggest adding language at the end of the 3rd paragraph: "Local, regional, corridor, and other plans should include the identification, assessment, and probable impacts of climate change/Sea Level rise, over time, and be able to track and monitor adaptation progress."
- Page 71: Suggest replacing link to online interactive mapping tool to statewide viewer here (the current link only goes to D4 viewer): https://svctenvims.dot.ca.gov/DEA_Library/; the DEA GIS Library contains not only the VAs, but also the APRs and variety of companion spatial datasets

potentially of interest to LCPs like the Coastal Zone, groundwater SLR, habitat areas, etc.

- Page 71/31: Suggest include link to Districtwide Adaptation Priorities Reports: https://dot.ca.gov/programs/transportation-planning/2020-adapation-priorities-reports
- Page 74: Consider inclusion of content on groundwater SLR coming from release in August 2020 of the *Projected responses of the coastal water table for California using present-day and future sea-level rise scenarios*: https://www.sciencebase.gov/catalog/item/5b8ef008e4b0702d0e7ec72b
- Page 76: Suggest adjustment to last sentence, "Working with the Commission, Caltrans has also developed a SLR guidance webpage for reference by Caltrans staff and others who may interested in adaptation of the transportation system in California."
- Page 79: Suggest inclusion to last sentence of the first paragraph of "corridor plans" before regional transportation plans, and Local Hazard Mitigation Plans
- Page 91: Suggest inclusion end of first paragraph of, "The ability to use retreat strategies like realignment for transportation infrastructure will depend on the urban, rural, and geologic setting; for example, it is critical that the full range of alternatives are examined in highly constrained urban areas, and communities will need to work closely with their local, regional, State, and Federal partners to reimagine the opportunities for redesigning themselves and their coastal resource areas."
- Page 91: Suggest inclusion of Gleason community impacts without realignment project, "Without this realignment project, cliff erosion would have continued to undermine the highway – and what is now a three-minute drive would require an hour detour for travelers if something was not done to ensure the continuity of this corridor."
- Page 101: note that expected service life for culverts has been described in Caltrans' District Vulnerability Assessments as up to 100 years
- Pages 174 – 175; pages 53, 82, and 113: check spelling on Humboldt, and King Tides Project
- Page 222: Correct "Adaptation Strategies Reports 2020-2021" to "2020 Adaptation Priorities Reports"
- Page 222: The Caltrans Strategic Plan is now completed which can be found here: Caltrans 2020-2024 Strategic Plan: https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf. Please remove "Caltrans Strategic Management Plan (Draft, 2021).

- Page 222: The link to the California Transportation Plan 2050 can be found here: https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan
- Page 222: The Climate Action Plan for Transportation Infrastructure (CAPTI) was approved in March 2021 and can be found here: https://calsta.ca.gov/subject-areas/climate-action-plan

Any questions or requests for clarification on any comments provided should be directed to myself or Kate Anderson, Coastal Program Manager, within the GNEIS Office in the Division of Environmental Analysis at (916) 653-5308 or by email <kate.anderson@dot.ca.gov>.

Sincerely,

Philip J. Stolarski

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## Coastal Commission's Sea Level Rise Guidance

# Comments from Water Boards staff

UPDATED: September 24, 2021

## Note to Coastal Commission from Water Boards

Water Boards tracked changes document is available upon request

1. Please look through the document below for tracked changes and comments from Water Boards staff
2. If any clarification is required, please contact the respective Regional Water Board staff (especially for Region-specific inquiries) or Chris Hyun.
3. This Word Doc was converted from the original PDF to simplify collaborative editing, so the formatting is slightly altered from the original (especially the Table of Contents).
4. Comments for the whole document:
    a. Please check the spelling of "Humboldt" throughout
5. Comments for all of Chapter 6:
    a. Consider defining "disaster" and "significant effects" more specifically:
        i. For example, "Most of California's coastal counties have water-related infrastructure that is vulnerable to current or future coastal hazard." Alternatively, this sentence could read "Nearly all of California's coastal counties have wastewater or drinking water facilities vulnerable to flooding, saltwater intrusion, (and other impacts described above).
        ii. Another example: "The vulnerability of wastewater treatment plants has received much attention [in what ways and from who] due to statewide regulatory frameworks [what frameworks] and the importance of centralized wastewater treatment [why is it important] in protecting water quality [how does it protect water quality] at a broader scale." If this sentence doesn't allow for specificity but is rather used as an introduction, then the following sentences should answer the questions I've outlined above.
    b. Consider emphasizing the need for healthy water for people and the environment and its connection to critical water infrastructure.
    c. Consider listing, defining, or explicitly giving examples of "critical water-related infrastructure" could be more inclusive than the one in the wastewater section and used

earlier in the introduction, which would be both helpful to the reader and serve as an outline for the next items discussed in the chapter.

d. Consider using terminology from the Water Boards mission statement in the description of our agency.

e. Consider making the introduction of Chapter 6 clearer by setting up the rest of the section.

f. The chapter uses the term "components" frequently. Consider more clearly defining the term.

g. Consider defining "effective water supply”

6. See more specific comments and tracked changes below throughout the document. Thank you for all your work on this!

LEAGUE OF CALIFORNIA CITIES



September 24, 2021

The California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

**RE: League of California Cities Comments: Critical Infrastructure at Risk: Sea Level Rise Adaptation Planning Guidance for California's Coastal Zone – Public Review Draft, August 2021**

Dear California Coastal Commissioners and Commission Staff,

The League of California Cities (Cal Cities) has reviewed the August 2021 Public Review Draft Critical Infrastructure at Risk: Sea Level Rise Adaptation Planning Guidance for California's Coastal Zone (Guidance) and offers the following comments for your consideration. The comments submitted in this letter were developed in tandem with our Coastal Cities Group Leadership Committee and their staff, which have been participating in the California Coastal Commission's (CCC) Sea-Level Rise Working Group.

Cal Cities believes it is imperative for all coastal jurisdictions to plan for sea-level rise, particularly as it relates to critical infrastructure along the coast. The Guidance has clearly incorporated concepts such as phasing of sea-level rise planning that Cal Cities has advocated for through the CCC Sea-Level Rise Working Group. However, Cal Cities is concerned that some elements of the Guidance, in particular the model policies, do not factor in many of the legal and logistical challenges associated with planning for critical infrastructure, which by its definition is essential to the functioning of our communities. Adapting critical infrastructure will require local jurisdictions to be nimble as shoreline conditions, best available science, and legal frameworks change over time. Many of the model policies in the document do not offer the flexibility that is needed and could provide disincentives for local jurisdictions to update their Local Coastal Programs to address sea-level rise. Cal Cities offers the following comments in the sincere hope that the Guidance be as useful as possible and encourage local jurisdictions to plan for sea-level rise.

**General Comments:**

**1.** The Guidance places almost all its emphasis on nature-based solutions with the presumption that any type of coastal armoring is always the least preferred option. Acknowledging that some coastal communities have limited ability to relocate infrastructure and, therefore, some form of armoring might be the most appropriate adaptation solution in some situations would go a long way to address concerns of local jurisdictions on the Guidance. In practice, the use of

hybrid strategies will be much more likely to be instituted for critical infrastructure due to the threats to purely nature-based solutions during major storm events. It may be advantageous to place more emphasis in the Guidance on how to design hybrid and armoring strategies to provide as many environmental benefits as possible instead of placing most of the focus on nature-based solutions. While we understand that CCC staff intended "nature-based solutions" discussed in the document to include hybrid solutions, that is not clear in the model policies where only the term "nature-based solutions" is used frequently.

2. The siting and design of critical infrastructure is directly tied to the development it serves. We appreciate the portion of the Transportation section entitled "Duty to Maintain Public Road Access" beginning on page 56, which explains the constraints associated with planning for public infrastructure. The Guidance would benefit from having a similar section in the Water and Wastewater section, and the Executive Summary explaining the obligations of jurisdictions to provide basic health needs, such as water and wastewater service to private and public development. Abandoning service to an area requires many legal hurdles and, in many cases, could lead to environmental impacts as private property owners pursue alternate forms of waste management and water supply. This is, in many cases, the biggest factor in siting and design of critical infrastructure and it should be emphasized more in the Guidance.

3. We understand CCC staff's desire for the H++ sea-level rise scenario to be considered for long term programmatic planning or siting of new very critical infrastructure, however many policies overemphasize the utility of that scenario, particularly for work on existing infrastructure. The Ocean Protection Council's (OPC) State of California Sea-Level Rise Guidance states that the H++ is an extreme scenario that currently cannot be assigned a probability of occurrence due to lack of information. When we plan for critical infrastructure, we are not able to plan for all amounts of risk, as that would be impossible. Historically, critical infrastructure has been planned to address risk levels such as the one in a 100-year storm, or for very critical infrastructure, the one in 500-year flood event. Critical infrastructure serves coastal development that the OPC guidance recommends planning for the medium-high risk aversion scenario. The medium-high risk aversion scenario is already very conservative, with a one in 200 chance of being met or exceeded. Certain very critical new facilities will require consideration of extreme scenarios, such as the H++. However, the majority of infrastructure should be sited and designed to a more reasonable level of risk associated with the development being served.

   From a logistical standpoint, it is not a simple exercise to plan for the H++ both because of the infeasibility in many cases of siting and designing to that scenario at this juncture, and because agencies, such as the United States Geological Survey (USGS) Coastal Storm Modeling System (CoSMoS), have not provided modelling or data for most of the parameters associated with the H++ scenario. Requiring analysis of the H++ at a programmatic level is possible but requiring it for every infrastructure project that is implemented will require significant time and money for information that is unlikely to actually be used in the siting and design of many projects.

4. Historically coastal cities have designed and sited critical infrastructure with long life spans (up to 100 years in cases). Given the changing conditions of California's shorelines, one of the biggest lessons learned from sea-level rise planning has been that the life spans of shoreline infrastructure are no longer 100 years and phased planning will be required. This is highlighted in the Guidance, however, in the model policies section there are requirements to site and design to prescribed life spans, such as 100 years, that may no longer be appropriate. Given that infrastructure is managed by agencies who will have more resources and incentives to move infrastructure when it is threatened, there should be more flexibility in the model policies in assigning design lifespans.

5. Many of the model policies outlined in the Guidance strive to encourage certain actions, but instead of being worded "when feasible" are worded "shall" or in other prescriptive terms, such as "prioritize." Legally these terms are very meaningful and there are cases, such as when failure of infrastructure during a major storm could cause significant environmental damage, where cities will not be able to, for example, "prioritize nature-based solutions." Many of these prescriptive terms need to be restated to read "where feasible." At the end of this comment letter, we highlight some of the model policies where this adjustment should be made.

6. Appendix A of the Guidance states that the CCC interprets "existing development" in the Coastal Act, Public Resources Code Section 30235, as development in existence as of January 1, 1977. Over many years, numerous coastal jurisdictions have commented to the CCC that this interpretation by CCC staff presents significant legal liabilities for local jurisdictions given that many coastal development permits (CDPs) (including those issued by the CCC) were approved with findings that "existing development" was what was on the ground at the time of permitting. Cities' ability to defend lawsuits against the 1977 interpretation has been extremely diminished given the CCC successfully argued against the 1977 interpretation in *Surfrider Foundation v. California Coastal Commission*. In general, many coastal jurisdictions are not against the idea of setting a date for "existing development." However, not all cities can make that date in the past work and roll back years of alternate interpretations by both CCC and local jurisdictions. This issue is one of the main reasons that many jurisdictions are not undertaking or have stopped work on their local coastal plans (LCPs).

7. There should be some discussion in the Guidance of how mitigation of impacts could occur. In many cases, the jurisdictions proposing infrastructure are also the same jurisdictions managing sediment, beaches, and open spaces in the same area. It should be a priority to mitigate any impacts of protection structures in the same area of impact. Local jurisdictions therefore should be allowed to receive funding and the ability to mitigate impacts in or adjacent to their own jurisdictions.

8. There are a lot of monitoring requirements in the model policies, but no guidance on what data or parameters should be used. To be effective, monitoring along the coast should be coordinated so cities are all using the same parameters and methods. In addition, regional or statewide monitoring would assist with avoiding duplicative efforts and allow for the study of impacts outside of a project's immediate area. It would be a

benefit to all if the state would assist with funding and implementing of these types of monitoring.

The following are comments for some of the model policies outlined in the Guidance to demonstrate how additional flexibility is needed in most of the model policies. Our suggested edits are outlined in blue text and our comments are outlined in red below:

**Model Policies Comments:**

HAZARD ANALYSIS

21. ***Planning Horizons for Transportation Infrastructure****. Sea level rise impacts shall be evaluated over a time period appropriate to the planning or project type. Adaptation planning and transportation system planning documents should consider the short-term transportation needs and priorities within a long-term context of potential SLR impacts ~~(minimum 100 years).~~ For example, system plans, which often have a 20 to 30-year horizon, should identify the necessary short-term projects such as repair and maintenance, temporary protection, or other phased adaptation measures that support possible long-term adaptation approaches. Planning horizons for individual projects should reflect the anticipated lifetime of the project, or the time period over which the project is expected to be usable for the purpose for which it is designed. The anticipated lifetime of major infrastructure projects such as new or realigned roads or rail lines, road expansion, new bridges or tunnels, culverts, or other major structures, is often 100 or more years. Minor projects such as safety barriers, rumble strips, re-paving, lighting, or projects designed as phased adaptation measures often have anticipated lifetimes of 20-50 years.*

{More flexibility needed to pick alternate lifespans to allow for phasing.}

NEW INFRASTRUCTURE:

23. ***New or Expanded Transportation Infrastructure.*** *New transportation infrastructure – and transportation infrastructure projects that would widen or otherwise increase the capacity of the infrastructure shall, as feasible, be sited and designed to avoid becoming vulnerable to sea level rise over the appropriate planning horizon(s)* ***[See Example Policy 21]****. New transportation infrastructure shall, consistent with Section 30253 of the Coastal Act, 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;*
    c. *Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development;*
    d. *Minimize energy consumption and vehicle miles traveled; and,*
    e. *Where appropriate, protect special communities and neighborhoods.*

*New transportation infrastructure shall also be designed to avoid or minimize impacts to coastal resources, including public access, recreational resources, marine resources, sensitive habitats, agricultural lands and scenic and visual resources, consistent with the LCP. Additional considerations, such as reducing VMT and enhancing multimodal and Complete Streets opportunities, shall be assessed when planning new transportation infrastructure.*

POLICIES THAT IMPLEMENT VARIOUS ADAPTATION OPTIONS:

26. ***Nature-Based Adaptation Strategies.*** *Nature-based adaptation strategies with measurable environmental benefits shall be prioritized over strategies with additional coastal resource impacts, such as those associated with hard shoreline protective devices. Soft strategies (e.g., dune and wetland restoration, sand replenishment, and other options that do not fix the shoreline) shall, as feasible, be prioritized over hybrid armoring (e.g., strategies that fix the shoreline combined with natural features), and hybrid armoring shall be prioritized over hard shoreline protection. Hybrid armoring shall only be allowed if it complies with all of the requirements of* ***Policy 27****, except for the near-term danger requirement as specified in* ***Policy 27.a****. Instead of the near-term danger requirement, hybrid armoring may be allowed to protect infrastructure that is expected to be threatened by hazards in* ***[insert appropriate planning horizon, consistent with relevant planning and funding cycles; e.g., 20-30 years]****, and shall be constructed with enough lead time for vegetation cover to establish or for other steps to be completed so the project can provide the benefits for which it was designed. In all cases, the least environmentally damaging feasibly alternative shall be selected.*

28. ***Transportation Infrastructure Realignment****.* ***Siting of Realigned Transportation Infrastructure****. Any new transportation infrastructure footprint shall, as feasible, be set back or otherwise designed to be safe from the impacts of sea level rise over the life of the infrastructure ~~at least 100 years~~…*

STORMWATER MANAGEMENT:

38. ***Use Natural Processes to Improve Flood Prevention.*** *Flood hazard prevention and mitigation shall prioritize, as feasible, restoration of low-lying flood-prone areas and natural drainageways. Native plants and nature-based, "soft" stabilization shall be prioritized over methods that rely on concrete channelization or other "hard armoring" stabilization methods.*

39. ***Design of Stormwater Outfalls.*** *Development shall, as feasible, be sited and designed to avoid the adverse impacts of discharging concentrated flows of stormwater or dry weather runoff through outfalls to coastal waters, intertidal areas, beaches, bluffs, or stream banks.*

WASTEWATER MANAGEMENT:

40. ***Life Expectancy and Economic Analysis.*** *When applying for a coastal development permit for a major improvement ~~or upgrade~~ to wastewater infrastructure in a vulnerable area, ~~or for any shoreline armoring to protect vulnerable wastewater infrastructure,~~ the applicant should ~~shall~~ conduct a life expectancy and economic analysis for wastewater infrastructure…*

{This is an extensive, expensive study to be conducted for even minor upgrades and shoreline armoring.}

41. ***Long-Term Planning for Wastewater Infrastructure in Vulnerable Areas.*** *No coastal development permit shall be issued for any major improvements ~~or upgrades~~ to wastewater infrastructure in vulnerable areas ~~or for any shoreline armoring to protect vulnerable wastewater infrastructure~~, without the requirement for a long-term plan for adapting to sea level rise and coastal hazards. The long-term plan shall address impacts to water quality, protect coastal resources, and minimize use of shoreline armoring. In addition, consistent with Section 30412(d) of the Coastal Act, the plan shall identify, and where appropriate, reserve new sites for treatment plants or system components at locations that are safe from coastal hazards…*

    B. *Prioritize, as feasible, strategies that avoid hazards related to sea level rise, such as relocation. After hazard avoidance, the next priority ~~shall~~ should be nature-based adaptation strategies that reduce impacts to coastal resources and provide measurable environmental benefits.*

    C. *Select, as feasible, strategies that maximize protection of coastal resources, including public access, recreation, marine and terrestrial resources, and visual resources; ensure safety and stability of infrastructure; and maintain wastewater service to communities that is responsive to shifting community needs over time.*

{This analysis may be needed for a major overhaul but implementing on minor upgrades and shoreline protection will be difficult. Policies 40 and 41 could be combined to make any analysis needed programmatic in nature. The highlighted verbs are too prescriptive when there could be many other mandates to consider.}

GENERAL ADAPTATON PLANNING:

52. ***Nature-Based Adaptation Strategies.*** *Nature-based adaptation strategies with measurable environmental benefits shall be prioritized, as feasible, over strategies with additional coastal resource impacts, such as those associated with hard shoreline protective devices. Soft strategies (e.g., dune and wetland restoration, sand replenishment, and other options that do not fix the shoreline) shall be prioritized, as feasible, over hybrid armoring (e.g., strategies that fix the shoreline combined with natural features), and hybrid armoring shall be prioritized, as feasible, over hard shoreline protection. Hybrid armoring shall only be allowed if it complies with all of the requirements of the Shoreline Protection Devices Policy 53, except for the near-term danger requirement as specified in Policy 53.a. Instead of the near-term requirement, hybrid armoring may be allowed to protect infrastructure that is expected to be threatened by hazards in [insert appropriate planning horizon, consistent with relevant planning and funding cycles; e.g., 20-30 years], and shall be constructed with enough lead time for vegetation cover to establish or for other steps to be completed so the project can provide the benefits for which it was designed. In all cases, the least environmentally damaging feasibly alternative shall be selected.*

***53*. *Shoreline Protection Devices and Long-Term Planning**. Permits for new hard or hybrid shoreline protection to protect water infrastructure shall include conditions requiring long-term sea level rise adaptation planning that protects public safety and coastal resources, and ensures structural stability of that infrastructure, in a manner that, if feasible, does not require the long-term retention of the protective device. Subject to specific criteria, and notwithstanding any other policy in the LCP, hard or hybrid shoreline protective devices may be permitted to protect existing, critical water infrastructure at near-term risk from erosion or flooding when there is no less environmentally-damaging feasible alternative, when designed to eliminate or mitigate adverse impacts on local shoreline sand supply, and provided that: (a) special conditions state that the permit will expire in [insert appropriate timeframe considering long-term planning needs], and that (b) a sea level rise adaptation plan must be submitted for review and approval by [list agency] prior to the end of the permit term. Prior to the end of the permit term, the applicant shall also submit a permit amendment application to implement the measures identified in the approved sea level rise adaptation plan. If a sea level rise adaptation plan is not approved, the permitted shoreline protective device may be required to be removed.*

a. ***Hard shoreline protective devices shall be permitted when**: (1) needed to protect water infrastructure that is in near-term danger from coastal hazards; (2) there is no less environmentally damaging feasible alternative to the proposed shoreline protective device; (3) sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply; (4) sited and designed to avoid or minimize coastal resource impacts to the maximum feasible extent; and (5) all of the following standards are met:*

   i. ***Mitigation required**. Mitigation for impacts on all coastal resources shall, as feasible, be required. For shoreline protective devices on or adjacent to beaches, mitigation shall be required for all impacts, including impacts to public access and recreation, environmentally sensitive habitats, and shoreline sand supply that result from the footprint of the proposed shoreline protective device as well as from halted erosion that would have occurred over the life of the shoreline protective device. Mitigation shall minimize impacts to the extent feasible and fully compensate impacts that remain; mitigation shall address impacts that will occur over the full life of the structure, but may be assessed in appropriate increments, rather than being required entirely up front. For shoreline protective devices on or adjacent to other coastal habitats (e.g., wetlands), appropriate mitigation shall be required to address impacts to wetlands and other coastal resources. In-kind mitigation shall be prioritized, although in-lieu fee mitigation may be appropriate, such as when used for programs developed to advance community-wide public access goals (for mitigating impacts to public access) and environmentally protective adaptation strategies. Mitigation shall be designed such that the benefits derived from mitigation are equitably distributed and/or increase benefits to communities that have traditionally lacked public access opportunities and the benefits associated with other coastal resources.*

ii. ***Maintenance and monitoring***. *Shoreline protective devices constructed to protect water infrastructure shall be monitored and maintained in the permitted configuration to prevent increased impacts to public access, recreation, environmentally sensitive habitats, and other coastal resources.*

iii. ***Long-term planning***. *Approvals of shoreline protective devices shall include a special condition requiring planning for a long-term solution. This condition shall require the Permittee to acknowledge that the CDP only authorizes the development for an initial, temporary period, during which time the Permittee must develop a longer-term Adaptation Plan that, if feasible and consistent with other applicable LCP policies, does not rely on armoring. Permit applications shall include a plan and timeline for the development of the Adaptation Plan. The Plan shall include, at minimum, possible options to explore as long-term solutions, including phased adaptation strategies as appropriate, a mechanism and process to choose the preferred long-term adaptation approach, and a reporting cycle with deadlines for action. The Adaptation Plan shall consider and prioritize retreat/avoidance strategies, followed by feasible nature-based adaptation strategies. The plan shall also consider measures to minimize greenhouse gas emissions and to ensure the benefits and impacts to environmental justice communities, DACs, and EDAs are equitable. The date by which adaptation plans shall be completed shall depend on the vulnerability of the water infrastructure and its potential to cause coastal resource impacts. If the segment or facility is expected to be vulnerable in the near-term, adaptation planning shall be required in the near-term, and the permit shall specify a completion date that allows an appropriate amount of lead time for permit review and implementation before impacts are expected to become significant.*

iv. ***Assumption of risk***. *As a condition of temporary coastal permit approval for shoreline protective devices, applicants shall be required to acknowledge and agree to assume risks as required in Policy 59 (Assumption of Risk, Waiver of Liability, and Indemnity Agreement).*

v. ***Maximize environmental benefits***. *Any permitted shoreline protective device shall, as feasible, be constructed in a manner that maximizes environmental benefits. Such benefits shall not be considered the creation of habitats that require protection; when appropriate, such shoreline protective devices shall be removed as planned.*

Thank you for the opportunity to provide comments and for your consideration. We look forward to continuing to work with you and the Commission staff on the important work of fostering and protecting California's coast. If you have any questions, do not hesitate to contact me at ddolfie@calcities.org or (916) 658-8218.

LEAGUE OF CALIFORNIA CITIES

Sincerely,

Derek Dolfie
Legislative Affairs, Lobbyist

cc: Jack Ainsworth, Executive Director, California Coastal Commission

# City of Huntington Beach

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DEPARTMENT OF COMMUNITY DEVELOPMENT

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September 24, 2021

**VIA Electronic Mail:** StatewidePlanning@coastal.ca.gov

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

**Subject: Comments on Draft Sea Level Rise Planning Guidance**

Dear Coastal Commission staff,

The City of Huntington Beach appreciates the opportunity to review the California Coastal Commission (CCC) staff's August 2021 public review draft document entitled *Critical Infrastructure at Risk, Sea Level Rise Planning Guidance for California's Coastal Zone* and submits the following comments on the draft document:

1. Sea level rise is a gradual process, occurring over decades. The H++ scenario is a second half of the century scenario with no assigned probability of occurrence. State of California Sea-Level Rise Guidance (OPC 2018) states: *"…the scientific community has made significant progress in producing probabilistic projections of future sea level rise, and the team of scientists advising the Ocean Protection Council (OPC) on this Guidance strongly recommended that decision-makers use probabilistic projections to understand and address potential sea-level rise impacts and consequences."* [emphasis added] (OPC 2018, p. 4). As Commission staff's draft guidance notes, it is inappropriate and likely infeasible to site or design a project today such that it will avoid the impacts associated with an environmental hazard risk that has no assigned probability of occurring in 2100 – 80 years from now.

   Moreover, the latest update on global sea level rise science and future projections was provided by the Intergovernmental Panel on Climate Change (IPCC) in a 2019 special report titled *The Ocean and Cryosphere in a Changing Climate*. This report provides an updated probabilistic assessment of global sea level rise and specifically excludes the H++ scenario from these projections describing the assumptions made by DeConto and Pollard (2016) related to marine ice cliff instability as unproven and characterized by deep uncertainty. The deep uncertainty associated with dynamical ice loss from Antarctica is due to lack of knowledge about these processes and

disagreement among experts as to the appropriate models and probability distributions for representing such uncertainty (IPCC, 2019). Additional research from a group of scientists at Massachusetts Institute of Technology and Boston College concluded the assumptions regarding ice cliff instability were likely overestimated (MIT News, 2019). The latest science indicates the extreme sea level rise scenario, referred to as H++ in the OPC guidance, is not widely supported by the scientific community.

NASA and others are working on an update to the Sweet et al (2017) paper which was originally cited as the underpinning research to support the inclusion of the H++ scenario in the OPC 2018 SLR Guidance. NASA scientists have reported that the H++ scenario is no longer applicable and it is expected to be removed from the updated research report expected in late 2021. Furthermore, the IPCC Sixth Assessment from August 2021 lists 1 meter of sea level rise as the upper end of the likely range in 2100 under a high greenhouse gas emissions scenario. Consequently, we suggest that the final guidance indicate that the next OPC Update is unlikely to include the H++ scenario and clarify that evaluating such extreme sea level rise scenarios that have no assigned probability of occurrence may be enlightening but is not scientifically appropriate or justifiable as the basis for project design.

2. The draft guidance states that it is "advisory only and not regulation or legal standard of review". Appendix A of the draft guidance identifies several Coastal Act policies that Commission staff state are relevant to the evaluation of critical infrastructure projects. The fundamental Coastal Act and LCP hazard policies that address hazard risk seek to "minimize risks to life and property". Exposure to hazards does not necessarily result in loss of life or significant property damage, particularly if the probability of the hazard occurring is low. Please include objective standards to evaluate hazard risk for the purpose of preventing significant property damage or loss of life.

3. For infrastructure solutions that can significantly mitigate the impacts of sea level rise (SLR), consider establishing a streamlined permitting process that eliminates bureaucracy and makes it easier to construct solutions in a timely and cost-effective manner.
   a. Prioritize review and permitting for water and transportation infrastructure related to SLR mitigation.
   b. Consider cost and time to implement when proposing mitigation measures/permit requirements.
   c. Adhere to specific deadlines for approvals, along with limited number of reviews.

4. It would be helpful if the CCC can serve as a point of contact and/or provide oversight for coordination with the various Federal and State permitting agencies on behalf of the Local Agencies, similar to the Caltrans Local Assistance Office.

5. This draft guidance document advocates for the use of the most conservative SLR assumptions for the development of critical infrastructure. This seems to be a prudent design philosophy; however, it is not always possible. For example, Huntington Harbour is vulnerable to SLR. It is feasible that Huntington Harbour could retrofit sea-walls and bridges and be maintained as a viable community assuming SLR at less than 3-feet. If SLR progresses further in future years to the suggested 10-feet, the entire community will be inundated. Therefore, it does not make sense, to retrofit infrastructure in the Harbour considering a SLR of 10-feet as the draft guidance document suggests.

6. The draft Critical Infrastructure at Risk document presents a heavily biased argument that adaptive strategies to protect infrastructure will in fact cost more than relocating infrastructure inland and out of the path of SLR (Chapter 4 Relocations may reduce long-term cost). The notion of abandoning areas vulnerable to SLR, places coastal agencies in an adversarial position with private land owners within the municipality and potentially exposes the City to lawsuits and legal liability. The CCC should agree to defend and indemnify local agencies when imposing suggested CCC guidelines.

7. Current funding levels are not sufficient. Coordinated lobbying for Federal funding support should be included as a Principle for Aligned State Actions.

Thank you for considering our comments. We look forward to continuing to work closely with Coastal Commission staff on this matter.

Sincerely,

Ricky Ramos
Senior Planner

cc: Ursula Luna-Reynosa, Community Development Director
Jennifer Villasenor, Deputy Director
Jane James, Planning Manager
Bob Milani, Principal Engineer
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File

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Scenic Pacifica
**Incorporated Nov. 22, 1957**

September 24, 2021

California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

*Sent via email:* StatewidePlanning@coastal.ca.gov

**RE: Input on the California Coastal Commission Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone - Public Review Draft, 2021**

Thank you for the opportunity to provide input on the Coastal Commission's "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone," which seeks to enable communities to plan for and protect the critical transportation, water infrastructure, and other utilities that serve coastal and inland communities. Planning for sea level rise (SLR) is a complex and challenging endeavor, and the City of Pacifica is appreciative of the Commission's continued efforts to support and work alongside coastal communities as they strive to identify appropriate adaptation and mitigation strategies while balancing local interests and Coastal Act requirements. The City of Pacifica offers the following comments on the Critical Infrastructure at Risk Planning Guidance public review draft:

Sea Level Rise Scenarios

1. The probabilities associated with H++ and other scenarios should be clearly identified early in the document.
2. It is challenging to plan 80 years into the future, and it is especially difficult to do considering community engagement is a major component of planning (and a major part of good SLR planning as highlighted in this guidance document). It can be difficult for constituents to conceptualize such distant and theoretical scenarios, especially since this particular extreme scenario doesn't have a probability associated with it (as mentioned on pp. 21). Relying on this metric has the potential to lead to stagnated plans/policies, and general inaction due to disagreements/fear of the scenario. We would urge the Coastal Commission to provide additional information on other reliable scenarios.
3. On that note, the guidance appears to allow some room for other SLR scenarios, but not much. The introductory paragraph introduced the State SLR Principles as another tool for measuring SLR risk ("which calls for addressing a minimum of 3.5 feet of sea level rise in the next 30 years"). However, these principles are not mentioned again in the guidance (in comparison, the H++ scenario is mentioned 42 more times, and has a call-out box dedicated to online mapping sources showing the H++ risk (pp. 25)). While later in the document the guidance calls for the use of a variety of metrics/models to plan for a variety of SLR scenarios, few, if any, metrics or models other than H++ are highlighted in this guidance document. If the goal of the document is to provide useful information and tools to planners, relying on one extreme SLR scenario is not

particularly helpful. Local governments would benefit from the provision of other reliable scenarios/metrics to consider when assessing SLR and communicating with their constituents.

Funding

4. There should also be acknowledgement that FEMA, HMA, and BRIC programs do not fund sand replenishment projects, and that large scale nature-based adaptation funding is difficult to find.

Model Policies

5. The guidance calls for required long-term planning that does not rely on armoring (pp. 160). This effectively forces a managed retreat plan to protect infrastructure that is afforded protection under the Coastal Act.
6. The guidance explicitly states that the model policies are "not a checklist of items that the Coastal Commission would expect to see in an LCP." Nevertheless, the guidance contains a list of model principles that "every community should consider […] in their LCP" (pp. 135). These two statements are contradictory make it challenging for local governments to understand how the Coastal Commission will be considering the policies and principles in this guidance document when it comes to reviewing LCPs and relevant projects. We recommend the Commission make it *consistently* clear throughout the document that this is strictly guidance and will not be used as a checklist of required items when reviewing LCPs and other relevant projects.

Types of Infrastructure/Adaptation Strategies

7. It is important to acknowledge that nature-based adaptation strategies can be unreliable, costly, and/or infeasible in some areas.
8. We recommend adding a note on pp. 217, Table F-2 that the table includes generalized cases and that these strategies may not always be feasible as site-to-site conditions range.
9. In Appendix D, the only category currently listed is "Treatment Facilities." We recommend an augmented Appendix D with additional studies of other systems components, such as pump stations and collection systems. There are many more types of infrastructure and utility facilities along the coast than just wastewater treatment plants. For example, the City of Pacifica has two stormwater pump stations located in the Coastal Zone.
10. The guidance specifies that it will be addressing two types of critical infrastructure - transportation and water - but notes that while other infrastructure types, including power plants, gas pipelines, and desalination facilities, are not explicitly addressed, many described adaptation approaches could broadly apply to these types of infrastructure as well (pp. vi). The guidance should clearly state what type of coastal infrastructure it addresses, and avoid ambiguous broadened applicability statements.
11. The guidance defines critical transportation infrastructure as: coastal roads, highways, and railroad facilities, yet the section focuses heavily on highways and railroads. It would be helpful to have the reason for a focus on highways and rail over roads acknowledged early in the chapter on transportation infrastructure.

Appendix: City of Pacifica's Sea Level Rise Adaptation Plan:

12. The guidance concludes by highlighting the City of Pacifica's *Sea Level Rise Adaptation Plan* cost/benefit analysis. Only a section of this plan is quoted, leaving out additional and highly relevant information regarding the challenges local governments face while planning for SLR adaptation. Pacifica's adaptation plan noted that factors such as tax impacts (losses) were not considered in the scope of the analysis and could be substantial – potentially impacting the City's ability to provide critical services to the community. The limited snapshot of the City of Pacifica's *Sea Level Rise Adaptation Plan* does not capture accurately the full picture of the challenges the community faces and therefore should be removed from the document.

Thank you again for the opportunity to provide input into this guidance report.

Sincerely,

Tina Wehrmeister
Planning Director/Assistant City Manager

cc: Kevin Woodhouse, City Manager
Lisa Petersen, Public Works Director

# County of Santa Barbara

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RE: Public Review Draft Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone

Dear Members of the California Coastal Commission and Staff:

Thank you for the opportunity to comment on the Draft Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone. At this time, the County submits comments from the Planning and Development Department.

If you should have further questions, please do not hesitate to contact my office directly, or Lisa Plowman, Director of the Planning and Development Department, at (805) 568-2086.

Sincerely,

Jasmine McGinty
Principal Analyst

cc: Lisa Plowman, Director, Santa Barbara County Planning and Development Department
Daniel Klemann, Deputy Director of Long Range Planning, Planning and Development Department

Enclosure: Santa Barbara County Planning and Development Department Letter, dated September 22, 2021

# County of Santa Barbara
## Planning and Development

**Lisa Plowman, Director**
Jeff Wilson, Assistant Director
Steve Mason, Assistant Director


September 22, 2021

California Coastal Commission
Executive Division
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San Francisco, CA 94105

Email: StatewidePlanning@coastal.ca.gov

RE: Public Review Draft, "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone," August, 2021

Dear Members of the California Coastal Commission and Staff:

The County of Santa Barbara (County) Planning and Development Department appreciates the opportunity to provide comments on the "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone" (Guidance document). We have provided comments below on the proposed model policies (Appendix B to the Guidance document). Our comments are not inclusive of all feedback we may have, but they cover our main concerns and recommendations on the Guidance document. Instead of copying model policy text into this letter, we reference the attached Appendix B.

**APPENDIX B. MODEL POLICIES**

Model Policies for Transportation Infrastructure

**Policy 2. Advance Planning for Transportation Infrastructure.** It is unclear to which transportation facilities this policy is intended to apply, given that it addresses transportation infrastructure owned by a local government (in the first sentence) and Caltrans/other asset owners (in the second sentence). Many of the proposed model policies have the same issue. Please revise the model policies in Appendix B by more clearly separating and describing policies (1) intended to apply to transportation infrastructure owned by a government and (2) intended to apply to other transportation infrastructure.

Additionally, this model policy is not feasible for portions of critical infrastructure in Santa Barbara County that are located within areas subject to coastal hazards. It would take the County several years, potentially decades, to identify, plan, fund, and implement adaptation strategies. Local governments need the flexibility to ensure the continuance of existing critical infrastructure for public health and safety. Therefore, we suggest the following revisions (shown in strikeout/underline):

> [Insert name of local government] should make all feasible efforts to ensure that ~~S~~segments of transportation infrastructure that are vulnerable or that are expected to become vulnerable to coastal hazards, including those associated with sea level rise, are ~~shall be~~ identified in time to plan, fund, and implement adaptation projects before significant impacts to coastal resources and public safety occur. [Insert name of local government] shall work with Caltrans and other transportation asset owners and managers to conduct such advance planning in order to avoid the need for emergency shoreline protective devices, where feasible, to protect coastal resources, and to provide enough time to complete comprehensive planning and implementation processes.

**Policy 3. Adaptation Strategy Alternatives.** The Coastal Commission's model policies should clarify that some essential transportation facilities cannot be removed and will need to continue to be allowed even if their continuance impacts coastal resources. For example, Highway 101 is a vital and irreplaceable component of Santa Barbara County's and the State's transportation network. The County does not have a feasible option to relocate existing, or create entirely new, infrastructure outside of hazardous areas due to the unique geography of the area. Therefore, sea level rise adaptation for Highway 101 in Santa Barbara County will have to prioritize the highway's continuation and current alignment, even if it impacts coastal resources. Therefore, County staff suggest that the Coastal Commission add a sub-bullet to Model Policy 3, stating that, "In all cases, the selected strategy shall . . . Prioritize essential transportation infrastructure that is irreplaceable and essential to the regional community."

Additionally, Model Policy 3 requires that adaptation plans and strategies contain a fiscal analysis that, in part, "estimate(s) the anticipated future costs caused by increased coastal hazards, if applicable, including from damage to facilities, need for upgrades, and loss of recreational areas, habitats, and natural protective features." Such an extensive fiscal analysis may be appropriate for an adaptation plan or for a larger infrastructure proposal, but would be cost-prohibitive for individual projects—especially since Model Policy 8 does not specify which types of "specific projects" would be subject to such an expensive analysis. We recommend that Model Policy 3 specify the types of "specific projects" that would require this fiscal analysis.

Finally, Model Policy 3 (and other model policies) would require critical infrastructure to "minimize vehicle miles traveled." This Guidance document should define and provide examples of what minimization of VMTs would entail in adaptation strategies for existing infrastructure.

**Policy 5. Planning for New or Expanded Transportation Infrastructure and Development.** This policy purports to apply to "new" or "expanded" transportation assets. However, the policy wording also states, "[Insert name of local government] shall ensure consistency between land use and transportation planning by prioritizing network-scale vulnerability assessments and appropriate land use planning before committing to potential expansion or replacement of transportation infrastructure in vulnerable areas." Therefore, this proposed policy applies to replacement as well as new and expanded infrastructure. To reduce potential confusion, we suggest that the model policy header and policy wording be amended to clearly state that the policy applies to new, expanded, and replaced transportation assets or the reference to expansions or replacement of existing facilities should be removed.

Additionally, for public safety reasons local agencies may be required to expand essential transportation infrastructure without a network-wide vulnerability assessment. Therefore, we suggest the following revision:

> . . . ~~No~~ If feasible, new or expanded transportation infrastructure located within vulnerable areas ~~shall~~ should occur ~~until~~ following completion of a network-wide vulnerability assessment and adaptation plan ~~have been developed~~ which assures alignment between the LCP and other relevant local, regional, and statewide documents and planning efforts.

**Policy 8. Public Works Plans.** Repair and maintenance of existing transportation assets should be allowed without a vulnerability assessment and Public Works Plan. Otherwise, this model policy may prevent repair and maintenance activities that protect public safety. Additionally, replacement of existing critical infrastructure that cannot be removed from vulnerable areas should be allowed. Please see the suggested revisions below.

> [Insert name of local government] should make all feasible efforts to ensure that ~~S~~segments of transportation infrastructure that are vulnerable or that are expected to become vulnerable to coastal hazards, including those associated with sea level rise, are ~~shall be~~ identified and prioritized to provide time to plan, fund, and implement adaptation projects . . . ~~No~~ If feasible, new or expanded transportation infrastructure located within vulnerable areas ~~shall~~ should occur ~~until~~ following completion of a network-wide vulnerability assessment and adaptation plan . . . Repair and maintenance of existing transportation assets shall be allowed to ensure public safety regardless of whether a network-wide vulnerability assessment and Public Works Plan have been prepared.

**Policy 12. Preempted Railway Project Coordination.** County staff suggest the following verbiage change since local agencies have limited land use regulatory authority over railroad assets:

> When railway owners, operators, or managers undertake a railroad facility development project that is preempted from state or local coastal permitting requirements, [insert Caltrans and/or name of local government] shall coordinate with the relevant railroad or other entities to ~~ensure~~ request that they (1) share their plans with the community; (2) use best management practices to minimize resource impacts. . .

Additionally, we recommend that the Guidance document provide specificity regarding acceptable types and levels of coordination with a "railroad or other entity." Historically, local governments have had little success in actively engaging railroad operators on climate vulnerability and adaptation efforts.

**Policy 13. Environmental Justice Impacts.** In the first sentence of this model policy, is the Coastal Commission talking about "highway plans and projects" or "adaptation proposals?" We suggest amending the model policy for clarity. Additionally, the second sentence is in error because a local agency does not have the authority to "choose" a highway plan or design – this decision is Caltrans' to make. Therefore, we suggest amending the language to state that the local agency would "coordinate" with the transportation agency on their plans/designs and would "support" various

options, and we request specificity regarding the Coastal Commission's acceptable types and levels of coordination between local governments and state transportation agencies.

**Policy 20. Best Available Science.** Please describe, within the context of this policy, what it means for a local agency to require that an individual project include "additional adaptation pathways" to "address higher sea level rise amounts."

**Policy 23. New or Expanded Transportation Infrastructure.** This model policy may prevent new coastal amenities like bicycle paths or transportation assets that would increase non-motorized or non-automobile capacity. If this is not the intent of the policy, please revise the policy to clarify that it only applies to transportation projects that increase vehicle capacity (or single occupancy vehicle capacity). Additionally, there are cases where a local agency cannot site the expansion of existing transportation infrastructure to avoid becoming vulnerable; the policy should be amended to account for this reality and afford practical solutions to avoid such vulnerabilities, where feasible.

Model Policies for Water Infrastructure

**Policy 42. Wastewater Infrastructure Planning and Land Use.** This model policy may prevent wastewater management operators from serving existing development if existing wastewater treatment facilities need to be upgraded or replaced. We suggest clarifying that wastewater treatment plans are allowed to be upgraded or replaced in order to continue serving existing development, to ensure public health and safety.

**Policy 44. Recycled Water Management Plan.** This policy appears to be forcing 100% recycled water reuse upon wastewater management operators and their ratepayers. Is this a requirement under the California Coastal Act? For purposes of this Guidance document, it would make more sense if this policy specifies that when a wastewater management operator prepares a Recycled Water Management Plan, that plan should factor in the future effects of sea level rise.

**Policy 58. Environmental Justice Impacts.** See comment on Model Policy 13.

Thank you for the opportunity to comment on the Public Review Draft "Critical Infrastructure at Risk" Guidance document. If you have any questions, please do not hesitate to contact me or Dan Klemann, Deputy Director of Long Range Planning, at (805) 568-2072.

Sincerely,

Lisa Plowman, Director
Planning and Development Department

Enclosure: Public Review Draft, "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone," August, 2021, Appendix B: Model Policies

cc: Meagan Harmon, California Coastal Commissioner, 455 Market Street, Suite 300, San Francisco, CA 94105
Dan Klemann, Deputy Director, Long Range Planning, County of Santa Barbara

Zoë Carlson, Senior Planner, Long Range Planning, County of Santa Barbara
Scott McGolpin, Director, Public Works Department, County of Santa Barbara

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Statewide Planning
StatewidePlanning@coastal.ca.gov.

Sept. 24, 2021

RE: General recommendations and comments for the Draft Critical Infrastructure SLR Planning Guidance

Good afternoon,

Please accept our initial comments regarding the Draft Critical Infrastructure SLR Planning Guidance.

**Recommendations:**

1. Per the Coastal Act requires each of the 76 coastal jurisdictions in California to prepare a Local Coastal Program (LCP), containing the ground rules for future development and protection of coastal resources through the local coastal permitting process, and specify appropriate locations, types, and scale of new or changed uses of land and water. Each LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). **It is vital that LCPs ensure that local Tribal communities have opportunity to participate in planning actions and that their resource needs are met meaningfully. Coordination, partnership, Consultation and Co-management of areas of cultural and subsistence importance should be paramount for use in LCP, state and local planning efforts. Resources should be prioritized for resource protections.**

2. **To support state and local planning efforts the Coastal Commission and local decision-making agencies should work to support Tribes in gathering information on regional impacts from climate change to Tribal subsistence and cultural resources, and work with Tribes to develop solutions to protect Tribal heritage sites and cultural continuance.** This could include gathering an inventory of tribal planning needs and assets at risk from sea level rise, flooding, drought, erosion and other related danger. Any data collected would be maintained with protocols to protect culturally sensitive data in place at the direction of the Tribes.

3. While we understand that the purpose of the document is to support 'critical infrastructure' plan, in the document there multiple areas where the document lists the benefits of coastal uses, but does not include the importance of "Water networks" for food or cultural purposes. This begins with the first introductory paragraph that frames the benefits and uses of water for transportation, drinking water, recreation, for financial gain and that much of the existing infrastructure that allows people to access, recreate, live, and work in coastal communities…" **We recommend that the importance of coastal systems for food and cultural uses is reinserted throughout the document everywhere that such framing and benefits of coastal uses are listed.**

**PG:10 Nature Based Solutions**

This section in particular is missing the inclusion of coordination with of Tribes and use of Traditional Ecological Knowledge, Traditional science and Tribal management methodologies to plan and execute the implementation of nature based solutions. The 'Guidance' recommends local governments and asset managers prioritize nature-based adaptation strategies in all new sea level rise adaptation planning efforts, and recommends state agencies work together to strengthen and accelerate opportunities for using nature-based adaptation strategies", but this section must include Tribes in particular given the role of Tribes as the first stewards and regional managers of the land, waters and air who first stewarded and coordinated the development of regional ecosystems. Tribes have both developed and utilized nature based solutions since time immemorial. Tribes continue to have the knowledge of how to best restore and apply the very solutions needed to maintain the wider balance between all of the parts of the ecological webs within the state.

4. **Planning efforts should include outreach and invitations to all regional Tribes to participate as early as possible. Prior to initiating planning efforts Tribes really must be supported to have internal and local Tribe to Tribe conversations to identify which solutions and management strategies should be employed. Then these conversations should be brought to the wider regional decision-makers for integration into management plans.**

5. While we are encouraged that this document includes a reference to the use of the 2019, *Nature-Based Solutions for Coastal Highway Resilience: An Implementation Guide*, and related resources referenced in this section, these documents miss an important opportunity to highlight the need to develop infrastructure that supports critical ecosystems such wild-life bridges, underpasses and tunnels that allow for wild-life to have passage to avoid wildlife-car collisions, supports subsistence food resources to increase travel routes for wild-life escaping flood, drought, wild-fires and changing environments as we move through phases of

climate change. Bridges for bears and tunnels for tortoises have significantly reduced the number of wildlife-car collisions worldwide. **We recommend that infrastructure that supports safe passage for wild-life in critical ecosystem areas be reinserted as a multi-benefit priority in future infrastructure planning.**

**PG. 31 Tribes**

This section acknowledges that Tribes "play an important advisory role, especially given their traditional ecological knowledges and place-based knowledge." However, it fails to mention the planning and implementation actions that many Tribes are actively trying to restore and their current roles related to planning for climate change and resiliency at local, state and federal levels. It also fails to acknowledge the existence of Tribal science and Tribal research programs across the State of California. It is also missing references to Tribal climate adaptation or similar resiliency plans.

6. **Work with Tribes in partnership not just as advisors. Integrate the content of existing and continually updated Tribal resiliency plans.**

7. **Invite Tribes to participate fully early in the development of regional solutions, when projects overlap multiple Tribal traditional territories, convene a Tribal advisory committee to guide efforts, and also invite Tribes to Consult individually.** This allows Tribal staff and leadership to participate in appropriately and is respectful of multiple structures of each individual Tribes.

**PG. 33 Climate Change Science Advisors**

This section mentions entities that advise and provide guidance and data on climate change. However, it fails to acknowledge Tribes, Tribal Science and existing data managed by Tribal Governments. It also fails to mention that Tribes currently maintain an advisory role in many planning actions undertaken by state and federal entities for: ocean protection and planning, emergency response, and climate change/adaptation programs and policies.

"To help address the evolving nature of climate change impacts, there are entities that gather data, disseminate best available information, and provide guidance on the science of climate change and rising seas. For example, agencies such as the OPC, the National Oceanic and Atmospheric Administration (NOAA).."

8. Recognize and value Tribal Ecological Knowledge and Tribal Science by including the Tribes from the project area, and those Tribes who are in areas that will be impacted by the project, into planning and action plans. **This entire document should be reviewed and revised to ensure that when scientific**

**experts, LPCs, or state and federal agencies are in all listed to be included to gather or review scientific information that Tribes are also included.**

Lastly, we appreciate the care that was taken by staff to create this document and look forward to seeing an increase in Tribal priorities and collaboration in guidance, regulatory and planning documents in the state of California. Increased funding for Tribal engagement and collaboration will support these efforts.

Thank you again for the opportunity to provide comments.

Respectfully,

**Sherri Norris**
Executive Director
California Indian Environmental Alliance (CIEA)
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**VIA EMAIL**

September 24, 2021

California Coastal Commission
Executive Division
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Email: StatewidePlanning@coastal.ca.gov

***RE: Comments on the California Coastal Commission's Draft "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone"***

Dear Jack Ainsworth,

The Port of San Diego (Port) appreciates the opportunity to provide comments in response to the California Coastal Commission's (Commission) Public Review Draft of the Commission's "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone" (Draft Guidance) dated August 2021.

The Port is a regional, public benefit agency created in 1962, through the California State Legislature's adoption of the San Diego Unified Port District Act (Port Act). Through the Port Act, the Port was granted the state tidelands and submerged lands around San Diego Bay and is entrusted to manage the diverse waterfront uses on these lands in a manner that is consistent with the Public Trust Doctrine, promoting and balancing navigation, commerce, fisheries, recreation, and environmental stewardship. Within the Port's jurisdiction (Port Tidelands) are the waterfronts of five cities: San Diego, National City, Chula Vista, Imperial Beach, and Coronado. This area exists primarily in the California coastal zone, thus Chapter 8 and, in certain circumstances, Chapter 3 of the California Coastal Act (Coastal Act) also apply to the state tidelands and submerged lands that the Port manages.

In 2019, pursuant to Assembly Bill (AB) 691, the Port prepared and submitted to the California State Lands Commission (CSLC) a "Sea Level Rise Vulnerability Assessment and Coastal Resiliency Report" (AB 691 Report). This report assessed Port Tidelands' vulnerability to future sea level rise impacts following the best available science at the time (Ocean Protection Council's Rising Seas Report, published in 2017). It also identified

the potential costs of sea level rise impacts and a suite of adaptation strategies to avoid some of these impacts.

Since submitting the AB 691 Report the Port continues to prioritize nature-based shoreline solutions by implementing pilot projects to assess the potential for nature-based shoreline solutions around Port Tidelands to address coastal resiliency and sea level rise. Through its Blue Economy Incubator, the Port recently partnered with ECOncrete, Inc. to deploy a three-year pilot project, which replaced an area of rip-rap along Harbor Island with bio-enhancing, interlocking tidepools. This pilot project will study the effectiveness of this hybrid shoreline solution to enhance the ecological value of this area by recruiting native species to the shoreline, while still protecting the adjacent shoreline and landside public access areas. Earlier this year, in partnership with the State Coastal Conservancy and with collaboration from Commission staff, the Port completed a Port Master Plan Amendment to permit a living shoreline pilot project in Chula Vista. This pilot project will place reef balls along a historically eroded shoreline to assess how well the living shoreline recruits native oysters to the site and stabilizes the adjacent shoreline.

To further advance the need for adaptive management along Port Tidelands and to prioritize a balanced approach to addressing sea level rise, the Port is incorporating a Safety & Resiliency Element within its Port Master Plan Update (PMPU) effort. This element includes goals, objectives, and policies to guide future development to address coastal resiliency, and specifically sea level rise, as new development is proposed throughout Tidelands.

As one of the four ports identified in Chapter 8 of the California Coastal Act that is required to prepare a Port Master Plan and as a coastal permitting entity within California, the Port appreciates the Commission's effort to develop the Draft Guidance to protect and sustain critical infrastructure facilities along the California coast. Many of the assets and facilities located on Port Tidelands are coastal-dependent and could also be considered critical infrastructure, and we recognize that this Draft Guidance may apply to some of these facilities and our future adaptation planning so that they can continue to operate in the face of sea level rise.

Upon review of the Draft Guidance and in our experience planning and permitting critical infrastructure on Port Tidelands, the Port respectfully offers the following comments to expand the application of this important and inclusive guidebook:

**Clarify Use of the Draft Guidance in Practice**

Currently, there are numerous guidance documents that have been published to aid local jurisdictions in their decision-making when considering sea level rise impacts, including

the Ocean Protection Council's 2018 State Sea Level Rise Guidance and the Commission's Sea Level Rise Policy Guidance (updated 2018). These documents establish a framework that recommends analyzing certain projections or adaptation strategies based on levels of risk. Please clarify how the Draft Guidance fits into the established framework of these other guidance documents.

The Draft Guidance focuses on two types of critical infrastructure: transportation and water infrastructure. It also recognizes the interconnectedness of infrastructure systems as well as the interrelation with other types of uses that may not be considered critical infrastructure (e.g., parks, visitor-serving facilities). When planning for future sea level rise impacts and considering the interconnectedness of other uses with critical infrastructure systems, clarification of how the Draft Guidance would apply (or not apply) to other uses if they are connected to these applicable critical infrastructure facilities would be helpful.

**Acknowledge Multiple Approaches to Protect Critical Infrastructure**

The Port recognizes that there is not a "one-size-fits-all" solution to address inundation and flooding, which may be exacerbated by sea level rise along the Port Tidelands of San Diego Bay. As a result, the District's AB 691 Report identifies multiple examples of strategies that can be used to decrease hazards associated with sea level rise. These strategies include policy considerations, natural and nature-based solutions, and structural solutions. Likewise, the Federal Highway Administration's (FHWA) *Nature-Based Solutions for Coastal Highway Resilience: An Implementation Guide*, often cited in the Draft Guidance, acknowledges that multiple strategies may be needed to prevent coastal hazards associated with sea level rise, including structural approaches.

The Port supports prioritization of natural and nature-based solutions as demonstrated by the projects it has advocated and implemented in San Diego Bay; however, critical infrastructure may be interconnected with surrounding land uses such as coastal-dependent uses, for which structural solutions may be best suited to protect. It would be helpful for the Draft Guidance to provide examples or situations where structural solutions may be needed for the long-term, or recommend a process by which local governments can use to determine the most appropriate strategy to decrease coastal hazards from sea level rise. The Guidance would be strengthened as a resource document by providing a discussion on multiple adaptation strategies, including structural solutions, that may be considered to protect critical infrastructure, surrounding land uses, and other important coastal resources.

**Additional Adaptation Approaches for Coastal Dependent Uses, Maritime Seaports, and Public Trust Uses**

Port Tidelands include and are adjacent to the most urbanized land uses in San Diego County. Critical infrastructure such as roadways and storm drains are intertwined within

coastal-dependent uses, maritime seaports, and other Public Trust uses along San Diego Bay. Due to the density of the urban environment and space constraints surrounding Port Tidelands, many of the adaptation strategies presented in the Guidance, including relocation or managed retreat and nature-based solutions, may not be feasible. The Port agrees with the Commission that negative impacts to bay habitats and public access from use of structural solutions should be minimized. The Port encourages the Commission to highlight additional strategies through examples or case studies in the Draft Guidance that successfully protect in-place critical infrastructure that is serving coastal-dependent uses, maritime seaports, and certain Public Trust uses (such as recreation) in more constrained or urban environments.

**Support for Coordinated Local Planning**

The District supports the Commission's emphasis on coordinated planning to address sea level rise, and was encouraged to see the recent enactment of Senate Bill 1, a major step to help coordinate and fund state efforts to prepare for sea level rise associated with climate change. The San Diego region has a strong legacy of collaborating at a regional scale to plan and prepare for sea level changes along our coast. Through the San Diego Regional Climate Collaborative, local governments, philanthropic organizations, non-profit groups, the military, academia, utilities, and private businesses have been working together to share resources and communicate best practices regarding sea level rise for the past ten years. Along San Diego Bay, the Port entered into a Memorandum of Agreement in 2018 with the U.S. Navy to assist each other as both organizations prepare for sea level rise in the Bay. These collaborations enhance our ability to protect critical infrastructure which spans multiple jurisdictions and has a larger public benefit.

**Exploration of Phased Adaptation**

The Port supports a phased adaptation approach whereby incremental adaptation strategies can be deployed as the sea level rises. Due to the uncertainties of sea level rise projections, a phased approach based on triggers or thresholds seems practical. Further discussion with examples of appropriate thresholds and triggers to initiate adaptation would be helpful to include in the Guidance. Furthermore, while the Draft Guidance briefly mentions innovative forms of financing adaptation strategies such as tax increment financing, social impact bonds, and insurance-linked securities, it would be useful to provide a case study where these forms of financing have been used in a phased adaptation approach—even if outside of California or for different types of hazards.

**Conclusion**

Thank you for the opportunity to provide comments on the Draft Guidance. There are several points of alignment within the document, such as an emphasis on coordinated planning, support of phased adaptation, and consideration of environmental justice issues

throughout the adaptation planning process. We believe that our comments and suggestions can help to clarify the Commission's process for planning for and adapting to sea level rise for critical infrastructure facilities in the future.

As a regional economic engine and state lands trustee, the Port and its operations provide numerous public benefits, as reiterated in Section 30701 of the California Coastal Act that the ports of the State of California "constitute one of the state's primary economic and coastal resources and are an essential element of the national maritime industry." Many of our operations, including marine terminals, industrial maritime facilities, and commercial and recreational fishing and boating harbors are coastal-dependent and include or rely upon critical infrastructure facilities. With the diversity and importance of the uses throughout our jurisdiction, we support a flexible and adaptive approach that considers the unique characteristics of ports, harbors, and Public Trust needs as we continue to address coastal resiliency through Port Tidelands.

Port staff has worked closely with Commission staff from the local San Diego office on the PMPU effort, multiple Coastal Development Permits, Port Master Plan Amendments, and other coastal projects on Port Tidelands, many of which carefully considered coastal resiliency and sea level rise impacts. We value the coordination on these efforts and projects with Commission staff and we envision this close collaboration will continue.

The Port offers continued support of proactive planning for the future for California's coast, as well as other state and federal policies to protect and support ocean and coastal communities, coastal economies, and thriving ocean ecosystems. We welcome the opportunity to assist Commission staff on revisions to the Draft Guidance, as well as other opportunities to discuss and collaborate on statewide and regional goals, plans, and strategies to conserve, protect, and manage the California coast and Port Tidelands.

If you have any questions or require additional information, please do not hesitate to contact Jason Giffen, Vice President, Planning and Environment at (619) 686-6254 or jgiffen@portofsandiego.org, or Lesley Nishihira, Director, Planning at (619) 686-6469- or lnishihi@portofsandiego.org.

Sincerely,

Jason H. Giffen
Vice President, Planning and Environment

LOS ANGELES COUNTY
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September 24, 2021

**VIA EMAIL ONLY StatewidePlanning@coastal.ca.gov**

California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

Dear California Coastal Commission:

**Sanitation Districts' Comments on the "Critical Infrastructure at Risk – Sea Level Rise Planning Guidance for California's Coastal Zone" Public Review Draft**

The Los Angeles County Sanitation Districts (Sanitation Districts) have reviewed the "Critical Infrastructure at Risk – Sea Level Rise Planning Guidance for California's Coastal Zone" Public Review Draft (Guidance Report) by the California Coastal Commission. We thank you for the opportunity to provide comments.

To provide some background, the Sanitation Districts are a confederation of 24 independent special districts serving approximately 5.6 million people in Los Angeles County (County). The Sanitation Districts' service area covers approximately 850 square miles and encompasses 78 cities and unincorporated territory within the County. The Sanitation Districts construct, operate, and maintain facilities to convey, treat, recycle, and dispose of wastewater and industrial wastes and generate recycled water, bioenergy, and biosolids as byproducts of the treatment process. Further, the Sanitation Districts have developed and are in the process of developing Climate Change Vulnerability Assessments of our wastewater treatment plants, pumping plants, collection systems, and outfalls. The objectives are to identify vulnerabilities associated with and develop mitigation measures to address climate-induced impacts including, but not limited to, wildfires, drought, high temperatures, wind, precipitation and flooding, as well as the impact of rising sea level (where applicable).

The Sanitation Districts have approximately 15 pumping plants and 37 miles of pipelines within or very close to the California Coastal Commission coastal zone and this Guidance Report will mostly affect this infrastructure. As such, the Sanitation Districts are interested stakeholders in this process and offer the following comments.

**Comment 1 – The Sanitation Districts recommend the usage of the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway (RCP) 8.5 instead of the H++ scenario when evaluating impacts of sea level rise (SLR) due to the extreme uncertainty associated with the H++ scenario.**

The draft Guidance Report recommends evaluating the expected impacts to critical infrastructure that would be caused by approximately 10 feet of SLR by 2100 (using what is known as the extreme risk or "H++" scenario). While this recommendation is consistent with past recommendations by the Ocean Protection Council (OPC), the Coastal Commission's Sea Level Rise Policy Guidance document, and with how the California Coastal Commission has evaluated several projects for permits, the H++ scenario is much more extreme than IPCC's Fifth Assessment

Report (AR5) (IPCC, 2013) RCP 8.5 of 3.7 feet SLR by year 2070. The Sanitation Districts recommend usage of RCP 8.5 instead of the H++ scenario because RCP 8.5 is very conservative already and is consistent with a future in which there are no significant global efforts to limit or reduce emissions. At this point, the probability of the H++ scenario is currently unknown per the State of California Sea-Level Rise Guidance (OPC 2018) referenced on page 1 of the draft Guidance Report. Further, language in the Guidance Report itself recognizes that "at this point, it is difficult to estimate the probability that the H++ scenario will occur, and when the world may shift to the H++ trajectory" and that there is a "high level of uncertainty associated with physical processes that would trigger the H++ scenario" (page 16). RCP 8.5 is already a conservative model to use, given that, as mentioned above, it assumes there are no global efforts to limit or reduce emissions. Since there is such uncertainty in the extreme H++ scenario, we believe it is more appropriate to use the RCP 8.5 scenario.

**Comment 2 – Conversion of wastewater conveyance pipelines from gravity flow to a pressurized system may not be feasible, would be extremely costly, and could result in additional environmental impacts.**

The draft Guidance Report states that "while gravity flow may be a common design method for conveyance of wastewater and stormwater systems, such systems can use alternative components such as pressurized pipes for constrained locations, and pumping otherwise, including where necessary to avoid hazardous coastal areas" (page 116). Most of the Sanitation Districts' wastewater collection system is gravity flow. This recommendation could impact approximately 18 miles of gravity pipeline that we own and operate within the California Coastal Commission's coastal zone. Replacing those sewers with a pressurized system would be very costly to construct, operate, and maintain. Unlike a gravity system, each housing, commercial, and industrial property within the sewer system would also be required to be pressurized to discharge to the system. This would be done by installing a small pump station at each location and the system would have to then connect to a larger pump station in order to transport the wastewater to the treatment facility. Apart from cost, other issues include increased greenhouse gas emissions from construction equipment to build a new pressurized system, increased greenhouse gas emissions from increased power consumption, and increased risk of sewer spills due to the added risk of failure associated with the use of additional pumping stations. Additionally, we conduct a comprehensive maintenance program in which we regularly clean, crown spray, inspect using closed-circuit television (CCTV), and perform preventive maintenance activities within our sewer system. We are proactive by monitoring and conducting sewer rehabilitation and pumping plant projects when required to prevent failures. Therefore, we believe it is more appropriate to keep the system we already have in place rather than convert our gravity system to a pressurized system. If, in the future, there are adverse impacts to the wastewater collection system caused by SLR or if the community relocates from the area, we would re-evaluate options or relocate our system as well to ensure that we can continue to provide reliable wastewater service to the community.

**Comment 3 – Relocating and eliminating our infrastructure may not be feasible.**

Appendix B, Section 42 (page 156) contains concerning language regarding wastewater infrastructure: "New wastewater infrastructure shall not be constructed, nor existing infrastructure expanded, in a manner that encourages or facilitates new development in vulnerable areas; rather, it shall encourage new development in areas safe from sea level rise and coastal hazards." While we understand that the language is intended to prevent new development in the coastal zone that may be at future risk due to SLR, the Sanitation Districts would like to see this language removed. The Sanitation Districts do not have the authority to develop and approve general plans or development; rather, our role is to construct infrastructure to serve land uses and zoning designations within our service area, including those in coastal communities, consistent with the land use authority of local jurisdictions. We need the flexibility to be able to construct and expand infrastructure in a way that supports our ratepayers' wastewater needs and consistent with approved general plans. Therefore, we recommend that, instead of the language quoted above, the guidance focus on actions that local jurisdictions may wish to take to limit or avoid new development in the coastal zone that may be vulnerable to SLR.

**Comment 4 – Eliminating or relocation of wastewater outfalls is not feasible.**

Appendix B, Section 43 (page 156) states that "a plan shall be required to repair, retrofit, relocate, or eliminate vulnerable wastewater outfalls, to prevent damage and impacts to water quality where sea level rise could affect the flow of wastewater from outfalls and lead to backup and inland flooding. Outfalls and pump stations for offshore outfalls that are below sea level, or are likely to be below sea level with sea level rise and/or high storm tides, shall be eliminated, relocated, or retrofitted to prevent the entry of sea water and sand, to the extent practical. Evaluate whether or when the use of WWTP outfalls can be eliminated and the outfall removed while accounting for current and potential future uses of the outfall to discharge brine or other lower salinity byproducts from recycled water or other advanced water treatment projects." The Sanitation Districts have four outfall pipes that discharge secondary treatment effluent to the Pacific Ocean from our Joint Water Pollution Control Plant (JWPCP): (1) a continuously operated 120-inch diameter outfall extending 1.5 miles offshore to a water depth of approximately 200 feet; (2) a continuously operating 90-inch diameter outfall extending 1.5 miles offshore to a water depth of approximately 200 feet; (3) a 72-inch diameter outfall used only during times of heavy rains to provide hydraulic relief for flow in the outfall system; and (4) a 60-inch diameter outfall that serves as a standby outfall to provide additional hydraulic relief during the very heaviest flows. As detailed below, even accounting for the development of a significant potential recycled water program, complete elimination of our wastewater outfalls is not feasible. Even with a substantial reduction in dry weather flows due to water recycling, we project that there will continue to be 15-20% of the flow in the form of brine that must be discharged, and during wet weather excess peak flows that cannot be captured and treated for reuse must be discharged, so wastewater discharge infrastructure (i.e. outfalls) must continue to be available on an ongoing basis. Due to climate change, extreme wet weather events are increasing the size of these peaks (although they occur infrequently), and there is no feasible way to eliminate their discharge. Further, there are already NPDES permit measures in place to ensure that wastewater facility operators maintain the condition of their outfalls. For example, our outfalls are inspected annually using a remotely operated vehicle (ROV) and divers using a self-contained underwater breathing apparatus (SCUBA) in compliance with JWPCP's NPDES permit. The Sanitation Districts also recently installed anodes to provide cathodic protection to expand the life expectancies of our three largest outfalls for an additional 50 years. Therefore, we agree that planning for maintenance, repair, and retrofit of wastewater outfalls will always be necessary to avoid damage to wastewater infrastructure and adverse impacts to water quality where sea level rise could affect the flow of wastewater from outfalls, and we request that the language on page 156 be revised to omit the requirement to potentially eliminate and/or remove wastewater outfalls.

**Comment 5 – A Recycled Water Management Plan mandating implementation of beneficial reuse with an ultimate goal of 100% reuse is not covered under Coastal Commission jurisdiction. Further, a goal of 100% reuse is not practical and not cost-effective.**

Appendix B, Section 44 (page 157) contains concerning language about water reuse: "A Recycled Water Management Plan shall be required when a wastewater treatment plant is constructed or redeveloped and prior to approval of increased use of an existing vulnerable outfall or development of a new outfall. The objective of the Plan shall be to ensure that the maximum amount of treated effluent is used for beneficial reuse purposes, with the ultimate goal of achieving 100% reuse. The Plan shall identify actions the operator will take within a five- and ten-year period to implement beneficial reuse, as well as specific milestones and projected timelines to implement the proposed actions." We understand that this Planning Guidance is meant to serve as ideas or starting points from which to develop policies appropriate for local conditions; however, this statement is not appropriate to include in the Guidance Report. First, this type of requirement is outside of the jurisdictional purview of the California Coastal Commission. Additionally, the Sanitation Districts fundamentally object to this language and proposed approach for several reasons. Although the Sanitation Districts currently supply approximately 100,000 acre-feet per year of recycled water to water purveyors, and have a strong, longstanding commitment to water recycling, there are many factors that can prevent achievement of 100% reuse. First, 100% reuse is not technically feasible because advanced treatment (e.g. reverse osmosis) of wastewater and certain types of non-reclaimable wastewater will be needed and brine generated from that type of treatment cannot be eliminated using practical or economical technologies. In most cases, the only feasible means to achieve high levels of reuse will either be via potable reuse or agricultural

reuse (which is not an option in urban areas where most of the population – and therefore the most wastewater –is located). However, in many areas, there may not be enough capacity in local groundwater basins for indirect potable reuse (such as groundwater recharge) or existing surface water reservoirs, and regulations and permitting requirements are still under development for raw water or treated water augmentation (also known as direct potable reuse). Thirdly, wastewater agencies alone may not have the authority to carry out reuse and face obstacles such as the Service Duplication Act, which requires that "just compensation" be provided to water utilities for stranded infrastructure if water service is "duplicated" by another entity, nor do wastewater agencies have groundwater rights or the ability to unilaterally gain access to the use of groundwater basins or raw water storage reservoirs. Further, statewide cost impacts of 100% reuse will be in the tens of billions of dollars and will very likely trigger locally prohibitive costs without significant funding support from the State. In Los Angeles County, for example, a new Regional Recycled Water Program is currently being planned by the Sanitation Districts in partnership with the Metropolitan Water District. Should this project move forward, it could entail recycling about 150 million gallons per day at an estimated cost of $3.5 billion. Likewise, the City of Los Angeles is planning an ambitious water recycling program that will bring their ocean discharge to the lowest level possible, and they estimate that it will cost upwards of $15 billion. Lastly, 100% reuse will require significant costs to the State of California (particularly for the State Water Resources Control Board) for the development of new regulations and permits for wastewater agencies. Based on the Sanitation Districts significant experience over many decades of developing and implementing an extensive water recycled program, language in the Guidance Report suggesting that 100% reuse be required is not practical or cost effective and should be removed. We believe that promoting efforts to examine the feasibility of and planning for water recycling should be recommended, so that projects can be tailored to local conditions and water supply needs.

We appreciate the opportunity to provide comments. The Sanitation Districts requests an opportunity to review and comment on any response that the California Coastal Commission has to our comments and to receive notification of any forthcoming hearing date(s) or additional documents. Notifications can be sent to the contact below. We look forward to working with the California Coastal Commission on this important initiative.

If you have any questions regarding these comments, please contact Ms. Stephanie Olague at (562) 908-4288, extension 2742, or stephanieolague@lacsd.org.

Very truly yours,

Paul Prestia

Paul Prestia
Division Engineer
Wastewater Planning Section

JL:sw

September 23, 2021

California Coastal Commission
South Coast District Office
301 East Ocean Boulevard, Suite 300
Long Beach, CA 90802-4302

Subject: **Critical Infrastructure At-Risk Sea-Level Rise Planning Guidance for California's Coastal Zone**

California Coastal Commission:

Thank you for the opportunity to review the above subject Guidance to mitigate for adverse coastal resource impacts. The Orange County Transportation Authority (OCTA) respects the California Coastal Commission in leading various efforts across the state to protect California's coast. OCTA has been actively participating in studies with partner agencies or undertaken our own efforts in planning and building resiliency. Over the last several years, OC Parks has initiated a project to provide shoreline protection within Capistrano Beach Park. OCTA is in support of OC Parks' effort since these improvements would provide a protective buffer to critical infrastructure including the OCTA railway, Pacific Coast Highway, and Beach Road.

As the County Transportation Commission, OCTA's mission is to improve mobility for the residents of the County by offering multimodal solutions, improving safety and efficiency on the local arterial system, providing essential transit service and regional connections, and providing safe, convenient transportation to those with special needs. OCTA owns approximately 50 miles of railroad throughout the County. Since the early 1990's, the Southern California Regional Rail Authority (SCRRA) functions as the commuter rail operator for the Southern California region from Oceanside to Ventura, as well as support intercity rail connection between Los Angeles and San Diego. OCTA is a member of the joint powers' authority along with four other counties in the region that provide funding to SCRRA for commuter rail service. OCTA also serves as the managing agency for the Los Angeles – San Diego – San Luis Obispo Rail Agency.

As acknowledged in the document, the purpose of this Guidance is to help promote "…resilient coastal infrastructure and protection of coastal resources by providing local governments, asset managers, and other stakeholders with policy and planning information to help inform sea level rise adaptation decisions that are consistent with the California Coastal Act." This Guidance document should in no way be construed as a mandate for the local agencies to initiate infrastructure improvement projects as a result of recommendations and issues identified in the document.

With that in mind, the California Coastal Commission should collaborate with local jurisdictions by facilitating the local coastal permitting process. This collaboration would help to streamline locally sponsored projects to better address the challenges identified in the Guidance document.

With respect to critical transportation infrastructures, the Guidance outlined several adaptation strategies to consider when planning for the potential impacts of sea level rise. These included realignment, accommodation, shoreline protective devices, and nature-based adaptation strategies. Although OCTA supports the need for coordinated sea level rise planning, strategies involving the movement and/or relocation of transportation infrastructures are not necessarily feasible. Furthermore, Orange County is fully built-out in the coastal areas and there are inherent constraints that would result in economic, environmental, right-of-way, and community impacts. Therefore, the recommended realignment and accommodation strategies may not be practical or viable solutions for existing infrastructures and should not be communicated in the Guidance in such a way that suggests these are the only feasible solutions. These constraints/limitations should be disclosed in the Guidance document.

In addition, of the approximate 50 miles of railroad that traverse through Orange County, roughly five miles are located in south Orange County that are most susceptible to sea level rise. This five-mile stretch of the railroad is located within the cities of Dana Point and San Clemente. For example, an extended closure of railroad tracks between Mission Viejo/Laguna Niguel and Oceanside just occurred so that construction crews can work to stabilize tracks south of the San Clemente Pier Station. Coordination among OCTA, SCRRA, the California Coastal Commission, U.S. Army Corps of Engineers, the City of San Clemente, Amtrak, and BNSF Railway Company have been ongoing to minimize interruption to a critical transportation infrastructure.

Please feel free to contact me at dphu@octa.net or (714) 560-5907, should you have any questions.

Sincerely,

Dan Phu
Environmental Programs Manager

NORTH COUNTY TRANSIT DISTRICT

810 Mission Avenue
Oceanside, CA 92054
(760) 966-6500
(760) 967-2001 (fax)
GoNCTD.com

September 24, 2021

Via Email: SanDiegoCoast@coastal.ca.gov

Re: **Sea Level Rise Planning Guidance for California's Coastal Zone**

To whom it may concern:

The North County Transit District (NCTD) is in receipt of the August 2021 Sea Level Rise Planning Guidance for California's Coastal Zone (Guidance) as developed by the California Coastal Commission (CCC). With this letter NCTD is submitting formal comments to the Guidance Document, specifically Chapter 5 and Railway Governance and Planning.

Within this section the CCC presents the same position it has in the currently pending Declaratory order before the Surface Transportation Board (STB) Finance Docket 36433 (the "STB Action"). While the STB Action is currently pending before the STB, CCC and NCTD have worked together to address the open issues raised in NCTD's filing. With the Guidance as provided by CCC in August of 2021, the position taken is in direct opposition to the position of NCTD as provided in the STB Action.

NCTD hereby objects to the federal preemption and consistency position of the CCC as provided in the Guidance and asserts the position as provided in the STB Action which is attached hereto and made a part thereof.

NCTD welcomes an open discussion of these matters and any questions should be directed to myself at JGould@nctd.org.

Thank you for your time and consideration.

Sincerely,

R. Jacob Gould
NCTD Senior Legal Counsel

cc: Tracey Foster, NCTD Chief of Development Services

Encl: STB Finance Docket 36433 – NCTD Petition

August 28, 2020

Cynthia Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington DC 20423

**Re: Docket No. FD 36433 – Petition for Declaratory Order**

Dear Ms. Brown:

North County Transit District ("NCTD") respectfully seeks a waiver of its filing fee pursuant to 49 C.F.R. § 1002.2(e) for its Petition for Declaratory Order. NCTD paid the fee on August 28, 2020 to ensure immediate consideration of its Petition by the Board.

§ 1002.2(e) sets out the fee waiver requirements:

> *Waiver or reduction of filing fees.* It is the general policy of the Board not to waive or reduce filing fees except as described below:
>
> (1) Filing fees are waived for an application or other proceeding which is filed by a federal government agency, or a state or local government entity. For purposes of this section the phrases "federal government agency" or "government entity" do not include a quasi-governmental corporation or government subsidized transportation company.
>
> (2) In extraordinary situations the Board will accept requests for waivers or fee reductions in accordance with the following procedure:
>
> (i) *When to request.* At the time that a filing is submitted to the Board the applicant may request a waiver or reduction of the fee prescribed in this part. Such request should be addressed to the Chief, Section of Administration, Office of Proceedings, Surface Transportation Board.
>
> (ii) *Basis.* The applicant must show the waiver or reduction of the fee is in the best interest of the public, or that payment of the fee would impose an undue hardship upon the requestor.
>
> (iii) *Board action.* The Chief, Section of Administration, Office of Proceedings, Surface Transportation Board will notify the applicant of the decision to grant or deny the request for waiver or reduction.

First, NCTD is a state government entity. NCTD is a public agency charged by the California Legislature with the responsibility of providing public transit services in its areas of jurisdiction. The North San Diego County Transit Development Board was established in 1975 by California Senate Bill No. 802 to plan, construct, and operate public transit in North San Diego County. On August 30, 2006, California Governor Arnold Schwarzenegger signed AB 1238, which changed the name to the North County Transit District.

This fee waiver would be in the best interest of the public. NCTD provides crucial public transit services to the public in the densely populated area of North San Diego County. Using this fee for these vital transit services would be beneficial to the public.

Therefore, NCTD urges the Board to grant this request. Thank you for your consideration of this matter.

Sincerely,

/s/ Daniel Elliott
Daniel Elliott PLLC
2000 Pennsylvania Avenue, NW
Suite 7000
Washington, DC 20006
danelliottiii@outlook.com

**BEFORE THE**

**SURFACE TRANSPORTATION BOARD**

---

Finance Docket No. 36433

NORTH COUNTY TRANSIT DISTRICT -
VERIFIED PETITION FOR DECLARATORY ORDER

---

Daniel R. Elliott
Daniel Elliott PLLC
2000 Pennsylvania Avenue NW
Suite 7000
Washington, DC 20006
(703) 863-9670

Counsel for
North County Transit District

August 28, 2020

**BEFORE THE**

**SURFACE TRANSPORTATION BOARD**

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Finance Docket No. 36433

NORTH COUNTY TRANSIT DISTRICT
VERIFIED PETITION FOR DECLARATORY ORDER

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North County Transit District ("NCTD") hereby respectfully petitions the Surface Transportation Board ("STB" or "Board") for a declaratory order to eliminate uncertainty pursuant to its authority under 5 U.S.C. § 554(e) and 49 U.S.C. § 1321. First, NCTD asks that the Board find that 49 U.S.C. § 10501(b) of the ICC Termination Act of 1995 ("ICCTA") preempts any attempts by the City of Del Mar ("Del Mar") and the California Coastal Commission ("Commission") to regulate NCTD's rail line maintenance and any other upgrading activities in its rail right-of-way pursuant to the state and local coastal permitting regime in California. Del Mar specifically has sought review of NCTD's 2019 emergency rail maintenance (project to ensure that the track bed is stabilized to support continued operations) by the Commission under the Coastal Zone Management Act's ("CZMA") Federal Consistency Review and the California Coastal Act's ("Coastal Act") permitting regime, including Del Mar's own local coastal zoning ordinances. The requested actions by Del Mar would impose sweeping mitigation requirements on NCTD and the eventual relocation of the existing railroad line and potentially the construction of

a multi-billion dollar underground tunnel.[1] Its City Council has also voted to oppose NCTD's construction of safety fencing in its rail right-of-way that would mitigate tragic trespassing events and reduce ongoing delays to passenger and freight rail service. As a result, NCTD justifiably is concerned that a similar Federal Consistency Review or Coastal Act challenge to this fencing project is forthcoming. Moreover, NCTD has two (2) more major bluffs stabilization rail maintenance projects that it intends to undertake in Del Mar in the near future. Therefore, NCTD seeks a declaratory order now because it has numerous crucial, upcoming rail maintenance and upgrading projects that will be challenged under the Coastal Act or local coastal laws by Del Mar or the Commission based on their public statements described herein.

Second, NCTD seeks a declaratory order that an application of the CZMA Federal Consistency Review by the Commission when a federal action is involved to these rail maintenance and upgrading projects, especially involving a rail line relocation as suggested by Del Mar and the Commission, could not possibly be "harmonized" with the ICCTA because this land use regulation of crucial rail work would directly interfere with and even defeat rail operations, thereby causing an irreconcilable conflict between these two (2) statutes.

## BACKGROUND

### 1) NCTD Is a Common Carrier by Rail Subject to the Jurisdiction of the STB.

NCTD is a public agency charged by the California Legislature with the responsibility of providing public transit services in its areas of jurisdiction. The North San Diego County Transit

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[1] While Del Mar does not mention a tunnel in its correspondence to the Commission, it has asked NCTD to build a tunnel in the past as part of its ongoing campaign to move the rail line. Moreover, due to the densely populated and developed area at issue on the rail line in Del Mar, a tunnel is probably the only way the relocation can be completed.

Development Board was established in 1975 by California Senate Bill No. 802 to plan, construct, and operate public transit in North San Diego County. On August 30, 2006, California Governor Arnold Schwarzenegger signed AB 1238, which changed the name to the North County Transit District.

NCTD provides about 10.3 million passenger trips per year primarily in North San Diego County. It covers a geographic area of approximately 1,020 square miles with an approximate population of 849,000 people. Its services include the BREEZE bus, SPRINTER hybrid rail, COASTER commuter rail, FLEX demand response service, and LIFT ADA paratransit service.

NCTD has an operating budget of $127.4 million (FY21) and Capital Improvement Program of $39.5 million (FY 21). It is governed by a Board of Directors with voting members from the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, Solana Beach, San Marcos, Vista, and the County of San Diego. A representative from the City of San Diego serves on NCTD's Board of Directors as a non-voting member.

This Petition relates to the NCTD COASTER commuter rail line that runs north and south along the coast at the Pacific Ocean between the cities of Oceanside and San Diego. The San Diego coastal rail corridor is the southern terminus of the 351-mile Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Corridor. The LOSSAN Rail Corridor is Amtrak's second busiest intercity passenger rail corridor in the nation, and it is shared by commuter and intercity passenger and interstate freight rail services. The 60-mile San Diego coastal rail corridor runs south from the Orange County line to downtown San Diego and is 75% double-tracked. The rail corridor is also designated as part of the Strategic Rail Corridor Network ("STRACNET") due to its importance for national defense.

Prior to impacts of COVID-19 and subsequent public health orders, NCTD operated 22 trains each weekday, as well as weekend service. These commuter trains average 4,886 weekday boardings and 1.4 million annual boardings. This service uses seven (7) locomotives and 28 bi-level passenger coaches to provide the COASTER service. NCTD shares the use of its tracks with Amtrak, Metrolink, BNSF Railway ("BNSF"), and Pacific Sun Railroad ("PacSun"). Amtrak operates the Pacific Surfliner intercity service on the tracks, operating 26 trips daily between Los Angeles and San Diego. Also, Metrolink operates commuter trains between Orange County and Oceanside while BNSF operates four (4) to six (6) daily freight trains on the San Diego coastal rail corridor. In 2017, BNSF moved more than 4.3 million tons of freight on this rail line. In sum, this rail corridor on which NCTD operates is crucial in many aspects to the movement of interstate and local passengers and interstate freight, as well as to the nation's defense, in this local area, California, and the United States.

In 1992, NCTD acquired a 6.1-mile long portion of the San Diego Main Line ("the Line") from The Atchison, Topeka and Santa Fe Railway Company ("Santa Fe").[2] Part of the Line runs through Del Mar. Although this transaction transferred ownership of the track and related physical assets from Santa Fe to NCTD, Santa Fe retained the right to conduct freight operations on the Line pursuant to a permanent easement granted by NCTD, which are now handled by BNSF. In 1994, the Interstate Commerce Commission ("ICC"), the Board's predecessor agency,[3] issued a decision that authorized the acquisition of the Line, concluding, by the transaction, that NCTD had

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[2] The Santa Fe was a predecessor to BNSF. Other entities acquiring similar interests in property from the Santa Fe in the same transaction were the Orange County Transportation Authority, the Riverside County Transportation Authority, the San Bernardino Associated Governments, and the San Diego Metropolitan Transit Development Board.

[3] Under the ICCTA, Pub. L. No. 104-88, 109 Stat. 803 (1995), the ICC was abolished, and all remaining rail regulatory functions were transferred to the Board, effective January 1, 1996.

acquired sufficient power over Santa Fe's operations on the Line to require a finding that NCTD controlled the rail freight operations[4] and had thus become a common carrier by railroad subject to the jurisdiction of the ICC. *See Orange County Transportation Authority–Acquisition Exemption–The Atchison, Topeka and Santa Fe Railway Company*, 10 I.C.C.2d 78, 90 (1994). As noted, NCTD now operates the COASTER commuter rail service over the Line.

To provide and improve both interstate freight and passenger service on the Line, NCTD continually maintains and upgrades this corridor that runs along the coast of the Pacific Ocean, including through Del Mar. This maintenance of the Line includes stabilization of the Del Mar Bluffs ("bluff(s)") and other projects for these crucial freight and passenger rail services to safely and properly operate, like the safety fencing project. NCTD will continue to maintain the Line and engage in other projects to ensure the safety of the public along this right-of-way and to allow BNSF and NCTD to meet their common carrier obligations.

a) **Bluff Stabilization Projects.**

One of the projects at issue here on the Line is in a coastal bluffs area in Del Mar that is subject to ongoing erosion and localized slope failures, narrowing the distance between the tracks and the top of the bluffs over time. Bluff stabilization in Del Mar is crucial to this Line as erosion of these bluffs in the past has caused extremely unsafe and inoperable conditions for this vital rail service. (See December 5, 2019 NCTD Memorandum regarding Del Mar Bluffs Erosion and Stabilization attached hereto as Exhibit A.) The rail tracks on the bluffs are single-tracked and a

[4] Specifically, NCTD acquired control over maintenance, dispatching, new track construction, and scheduling of service on the Line.

critical failure would eliminate all passenger and freight rail operations within San Diego County as there is no alternative route to divert this service.

**NCTD RAIL LINE ALONG DEL MAR BLUFFS AT PRESENT**

Since 1998, NCTD and the San Diego Association of Governments ("SANDAG")[5] have implemented a multi-phase approach to preserve the track bed along the bluffs. Detailed geotechnical studies conducted during this time served as the basis for the stabilization construction that has occurred since 2001. In general, the bluffs are expected to retreat at an

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[5] The San Diego region is home to 3.35 million residents who live in 18 incorporated cities and the County of San Diego. SANDAG is the public agency that serves as the regional forum for those local governments to come together and conduct planning, decision-making, and project implementation. With oversight by a Board of Directors – made up of elected officials from the 18 city councils and the County Board of Supervisors – SANDAG works on a wide array of projects, programs, and initiatives that support the region's economy and protect the environment and quality of life. SANDAG also provides funding administration and planning for public transit in the San Diego region. It shares public transit planning and decision-making responsibilities with Caltrans, Metropolitan Transit System, NCTD, and other transit operators.

annual average rate of up to six (6) inches per year. However, the retreat occurs in episodes - with heavy rainfall, several block failures and surface slides have occurred since August 2018. After each erosion event, the corridor is closed to all train traffic while a complex, thorough inspection is completed, which causes transportation and economic impacts throughout the San Diego region. After one of these heavy rainfalls in November of 2019, NCTD and SANDAG completed an emergency bluff stabilization project in late 2019 that Del Mar formally has complained about in a Federal Consistency Review proceeding at the Commission described in more detail below.


**NCTD RAIL LINE ON DEL MAR BLUFFS AFTER EROSION EVENT IN 2019**

Eventually, bluff retreat in Del Mar will threaten the viability of freight and passenger rail service on the Line if measures to preserve the portion of the bluffs that supports the tracks are not

implemented. As part of this multi-phase approach, SANDAG and NCTD first completed an emergency repair in 2001, followed by drainage improvements and installation of a landslide warning system in 2003, and the installation of soldier piles in 2007 and 2010. NCTD and SANDAG are scheduled to begin another phase of construction on the bluffs in 2020. As a result, NCTD is extremely concerned that Del Mar and the Commission will interfere with these crucial, upcoming bluff stabilization rail projects under local, state or federal law that is applicable in coastal zones as described in more detail below.

b) **Safety Fencing Project.**

Moreover, NCTD plans to construct fencing along its right-of-way in Del Mar and other cities on this rail corridor to deter trespassing on the Line. This fencing is necessary to eliminate the tragic accidents and reduce passenger and freight delays that have occurred in the past in Del Mar and elsewhere involving trains and trespassers. NCTD soon will begin the construction of safety fencing on the right-of-way to deter the large number of trespassers, to protect the public from the self-evident dangers of the rail service near these tracks, and to mitigate the risks for passenger and freight carriers associated with substantial legal claims resulting from trespassing events.

Trespassers are common in the right-of-way along the bluffs of Del Mar and have led to numerous tragic accidents, including many deaths. There have been 112 fatalities and 174 incidents on the COASTER commuter rail line from 2010 to the present. (A copy of the NCTD trespassing incident chart is attached hereto as Exhibit B.) In Del Mar alone, there have been eight (8) fatalities and 14 incidents from 2014 to the present on the Line. These tragic accidents place significant stress on the train crews who witness these incidents and obviously on the families and

friends of the injured or killed. Moreover, these incidents cause passenger and freight shipping delays that impact the entire LOSSAN corridor. Typically, it takes 2 to 3 hours to restore normal operations after a fatality. These incidents also can damage the railroad infrastructure and equipment due to emergency stops. In addition, constant trespassing on the bluffs contributes to erosion creating more dangers on the Line. Finally, trespassers lead to potential liability and/or financial risks to NCTD and taxpayers. In fact, in October 2018, the Federal Railroad Administration ("FRA") issued a Report to Congress, National Strategy to Prevent Trespassing on Railroad Property ("Report"). (A copy of which is attached hereto as Exhibit C.)[6] The Report found that trespassing on railroad property is the leading cause of all rail-related deaths in the United States. More people are struck and killed by trains each year while trespassing – illegally entering or remaining on a railroad right-of-way – than in motor vehicle collisions with trains at highway-rail grade crossings. Between 2012 and 2017, the annual number of trespass-related pedestrian fatalities increased 18 percent, from 725 people killed in 2012 to 855 in 2017. The FRA found that the number of trespassing occurrences each year far exceeds the number of fatalities and injuries. This raises serious concern of the potential for even more trespasser accidents

To help understand the problem's scope, the FRA analyzed the costs to railroads and society from rail trespassing. It found that during the five-year period from 2012 to 2016, 9,363 reported trespassing accidents cost society $43.2 billion in fatalities and injuries (with an average cost of $4.6 million per accident) and more than $56.0 million in travel time delays. These

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[6] In its report on the FY 2018 Department of Transportation appropriation bill, the U.S. House of Representatives Committee on Appropriations requested that the FRA study and identify the causal factors leading to trespassing incidents on railroad property. The Committee also asked the FRA to develop a national strategy to prevent trespasser incidents and to submit the Report to the House and Senate Committees on Appropriations by August 1, 2018. This Report to Congress was the response to that request.

calculations do not include unquantified costs to the economy, such as lost productivity, and society, such as emotional distress.

The FRA explained that railroads own their rights-of-way and have a reasonable expectation of operating on their property without the presence or interference of unauthorized people. Any unauthorized person who enters or remains on a railroad right-of-way, equipment, or facility is trespassing. Trespassing on private railroad property, including a railroad's right-of-way, is illegal.

In response to the House Committee's request to identify and study the factors that lead to trespassing incidents, FRA studied available data and for the four-year period between November 2013 and October 2017, determined:

- Nationwide, excluding suicides, 4,242 pedestrians were killed or injured while trespassing on railroad property. With the 1,175 suicides included, the total rises to 5,417 people.
- Of the approximately 3,100 counties and county-equivalents in the United States, approximately 14 percent of all trespasser casualties occurred in 10 counties in 4 different states.
- In the top 10 counties, excluding suicides, 300 pedestrian trespassers were killed. With the 169 suicides included, the total increases to 469.
- 6 of the top 10 counties for trespasser casualties were in California and accounted for 7.9 percent of the U.S. total.
- The county with the most trespasser casualties, 110, was Los Angeles County, California, followed closely by Cook County (Chicago), Illinois, with 109 casualties.
- 74 percent of trespassing casualties occurred within 1,000 feet of a grade crossing.
- Slips, trips, and falls while trespassing caused 185 casualties, or 5 percent of trespassing casualties not at grade crossings.

The FRA found (with emphasis added) several community contributing factors to this rail trespassing dilemma:

a) No (or insufficient) dedicated resources (personnel or funding).

b) **Lack of physical deterrents, such as fences, natural or engineered barriers, or obstacles.**

c) Failure to prosecute trespassers by local judicial process.

d) Public perception of the dangers of trespassing on railroad property.

e) Poor community planning.

On the NCTD rail corridor, FRA personnel observed trespassers crossing railroad property to travel from a residential neighborhood to the beach. Because neither the neighborhood nor the beach is a candidate for relocation, the FRA stated that solutions to this problem could include physical barriers and additional enforcement. The FRA found trespassing for convenience and **lack of deterrence, such as fencing**, enforcement, or education, to be the main contributing factors to the high number of casualties in the County of San Diego (9th highest county in US).

The FRA determined that its analysis demonstrates that it needs to do more than educate and facilitate mitigation when trespassing issues arise. Proactive use of current, relevant data and analysis to identify areas at systemically high-risk for trespassing incidents is the best way to develop and facilitate implementation of specific mitigation strategies with communities, local governments, law enforcement, and impacted railroads. However, the FRA asserted that education and outreach are not enough. **It stated that engineering solutions (e.g., fencing, automated video detection systems) designed to prevent or discourage trespassing on railroad property can be utilized in conjunction with frequent and consistent enforcement of trespasser laws.**

As a result of these ongoing, tragic accidents on its rail corridor and this Report, NCTD is compelled to construct fencing to protect the public from the rail service on the Line in Del Mar.

NCTD soon will begin constructing safety fencing in its right-of-way in the following locations (estimated measures in linear feet (LF)):

1) Oceanside - Cassidy Street between S. Meyers Street and Broadway Street:
   - 1800 LF between MP 227.61 and MP 227.95 EAST of railroad tracks north of Cassidy.
   - 100 LF between MP 227.62 WEST of railroad tracks north of Cassidy Street.
   - 1320 LF between MP 228.20 and MP 228.45 EAST of railroad tracks south of Cassidy.
   - 2110 LF between MP 227.95 and MP 228.35 WEST of railroad tracks south of Cassidy.
2) Encinitas - Coast Highway between Encinitas Boulevard and La Costa Avenue
   - 13200 LF between MP 235.10 and MP 237.60 WEST of railroad tracks.
   - 13200 LF between MP 235.10 and MP 237.60 EAST of railroad tracks.
3) Del Mar – Del Mar Bluffs
   - 7390 LF between MP 244.1 and MP 245.5 WEST of railroad tracks.
   - 7390 LF between MP 244.1 and MP 245.5 EAST of railroad tracks.

This important fencing project is expected to cost over $2 million and will be funded from California monies from the Transit and Intercity Rail Capital Program but may later include federal dollars depending on how the funding process plays out in the future. As discussed above, this fencing project is crucial for the safety of the public and this vital interstate passenger and freight service as well as the commuter service on the Line. Like with the bluff stabilization projects, NCTD is extremely concerned that Del Mar or the Commission will interfere with this crucial rail safety project under local, state or federal law under the coastal permitting regime described in detail below.

**2) Del Mar Letter to California Coastal Commission Seeking Local, State and/or Federal Review of a Rail Maintenance Project by NCTD.**

Incorporated in 1959, Del Mar is a seaside city located just 20 miles north of the City of San Diego. The Line runs through Del Mar along the Pacific coast. Del Mar has a population of

approximately 4,200 people and covers 2.2 square miles. The community is primarily comprised of single-family residential neighborhoods, with retail uses and restaurants in the downtown, a commercial area, and several hotels. Del Mar employs approximately 60 full-time employees and 70 part-time, seasonal employees. Del Mar has constantly complained about the Line that runs through the bluffs and has consistently opposed actions by NCTD to maintain the Line and protect trespassers on the railroad right-of-way.

On April 21, 2020, Del Mar wrote a letter ("Letter") to the Commission, requesting extensive mitigation measures in a pending Federal Consistency Review proceeding (*SANDAG*, CC-0001-20 (filed 3/12/20)) of the SANDAG rail track bed emergency repair work mentioned above along a section of the coastal bluffs in Del Mar on the Line. (A copy of the Letter is attached hereto as Exhibit D). Del Mar claimed that the emergency repair work did not properly include mitigation for impacts to aesthetics and sought a commitment by the Commission to subject any future bluff stabilization project by SANDAG to Federal Consistency Review. As noted, the portion of the Line in Del Mar at issue in the Letter is owned by NCTD, which has responsibility for its maintenance and dispatching pursuant to its purchase agreement with Santa Fe described above.

In this Letter, Del Mar stated that the emergency repair work by NCTD to fix the coastal bluffs failure in the railroad right-of-way on the Line was entirely located within its Overlay Zones, which are provided for in Implementing Ordinances in Del Mar's Commission-certified Local Coastal Program ("LCP"). This LCP has been incorporated into the Del Mar Municipal Code ("DMMC"), in part, as Chapters 30.50, 30.55, and 30.60. Del Mar asserted that the standard of review for this emergency repair of a rail line is set forth in this certified Del Mar LCP, which

includes a Shoreline Protection Line ("SPL") that follows the approximate center line of the railway tracks.

As noted above, after heavy rains in late 2019, a portion of the bluff immediately adjacent to NCTD's rail track bed collapsed and portions of NCTD's rail track bed in Del Mar on the coastal bluffs were washed away, making rail operations extremely unsafe. Without this emergency repair work, NCTD, Amtrak, PacSun, and BNSF would not have been able to operate on the Line. As a result, NCTD immediately had to repair its track bed to ensure the safety of the rail operators and the public and to maintain service on the rail line that is critical to the national economy and military. The emergency repair work included the construction of bluff stabilization devices (retaining walls) adjacent to the track bed for two (2) sections of the failing bluffs and the excavation of loose soil to provide a stable working area. The emergency repair work resulted in exposed vertical walls visible from the beach below and the excavated soil was not replaced. The repair included shotcrete wall treatments that blended the wall face into the adjacent bluff.

In its Letter, Del Mar requested far-reaching, unduly burdensome mitigation measures for this interstate rail maintenance project to be levied by the Commission. First, Del Mar asked the Commission to require NCTD to cover the exposed walls entirely with natural material including soil and native plantings. It argued that under the Commission-certified Del Mar LCP (DMMC Section 30.50.060), the construction of a protective structure may be authorized if it meets a list of findings – in particular Finding G, which reads: "G. Will, if there is a vertical wall element in the proposed protective structure, have the seaward face of the vertical wall located within the Shoreline Protective Area only if there is no other feasible location for effectively protecting a principle structure; there is no feasible, less environmentally damaging alternative; **and feasible mitigation measures have been provided to minimize adverse environmental effects; but in**

**no event have the seaward face of the vertical wall more than five feet westward of the Shoreline Protection Area line.**" (emphasis added by Del Mar in Letter). Del Mar took the position that the exposed vertical walls treated with shotcrete were not consistent with the bolded section above and should include feasible mitigation to minimize adverse environmental effects to aesthetics. Del Mar claimed that this aesthetic mitigation of NCTD's crucial rail maintenance project should be added as part of the Commission's Federal Consistency Review.

Del Mar added that this mitigation is further supported by the fact that the location of the walls are more than five (5) feet westward of the SPL line (which follows the approximate center line of the NCTD railway tracks) and, although the wall location is justified to address the emergency, the walls should not be visible with the incorporation of this mitigation. Further, Del Mar asserted that the completed grading does not appear to be consistent with the coastal bluff setback provisions in DMMC Section 30.55.080 and that it is unaware if a geotechnical report has been provided to the Commission to sufficiently address the requirements of DMMC Section 30.55.090.

Del Mar then proposed a laundry list of mitigation requirements for future bluffs projects. Del Mar posited that the perpetual reliance upon long-term stabilization efforts along the Del Mar Bluffs must be addressed and requested a commitment by the Commission as part of this Federal Consistency Review that **any future bluff stabilization project** proposed by SANDAG on behalf of NCTD will:

1) Prepare a report and hold ample community meetings [by the Commission] to solicit public feedback as a prerequisite to submitting a project for Federal Consistency Review:

a) The report shall outline what was presented, what feedback was heard, and how the

project was modified as a result (or not modified with an explanation why); 2) Go through a full Federal Consistency Review process with ample public notice provided, including all interested parties and affected cities; 3) Be required to thoroughly analyze the project under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) and make the draft documents available for public review and comment; 4) Include a comprehensive analysis of the long-term effects on sand supply and coastal processes resulting from the proposed use of bluff stabilization structures; and 5) Analyze feasible alternative designs for the permanent, inland relocation of the rail corridor including: a) Anticipated funding sources; b) Reasonable timeframe for construction; and c) Use of NCTD bluff right-of-way post-relocation for purposes of public access, recreation, and open space.

This letter to the Commission clearly seeks an incredibly onerous review of routine rail maintenance by a common carrier, NCTD, on its rail line. It even goes so far as to ask the Commission to examine a relocation of the Line in Del Mar from the bluffs to an inland site and while not explicitly stated, attempts to advance the construction of a multi-billion dollars tunnel project that NCTD has no capacity to fund.[7] This incredibly burdensome track relocation request has been publicly supported by the Commission as the inevitable solution to the bluff stabilization issue. (See Del Mar Times, *State Coastal Commission Says Del Mar Train Tracks Need to Move Inland* (Aug. 16, 2020), attached hereto as Exhibit E). In addition, Del Mar has consistently attempted to limit routine maintenance projects on the bluffs to "temporary improvements" which includes attempts to limit the useful life of piles and other design elements of these bluffs' projects.

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[7] NCTD's engineering department has estimated the cost of this tunnel relocation project to be between $2.5 and $3.5 billion in 2017 dollars.

It also claims in the Letter that there were violations of various Del Mar ordinances under its LCP, that was certified by the Commission under state law.

This request by Del Mar was submitted to the Commission that is presently examining this project under the CZMA Federal Consistency Review after the fact due to its emergency nature. *See* 15 C.F.R. § 930.32(b). This Letter by Del Mar regarding this emergency rail maintenance project and challenges to future maintenance and upgrade projects in the right-of-way under the CZMA Federal Consistency Review and/or state and local coastal law, as well as the public statements by the Commission advocating for relocation of the Line, causes NCTD to have significant concerns about how application of this coastal regulatory scheme will impact its rail operations and interstate commerce in the near future. This concern is only compounded by Del Mar's vote to oppose NCTD's safety fencing project, which is set to begin soon. As a result, NCTD is compelled to seek this declaratory order to protect its rail service from this onerous coastal regulatory regime whether under local, state or federal law.

As the regulatory regime for coastal zones in California is quite complex and involves an interplay of local, state and federal law, it is important to have an understanding of how these coastal laws are employed to understand why the ICCTA clearly preempts the application of these laws in this instance.

**3) The Application of the CZMA and the Coastal Act.**

**A) The California Coastal Commission Is the State Agency Charged with Reviewing a Federal Activity for Consistency with California's Coastal Management Program.**

In 1969, California suffered a disastrous oil spill off the coast of Santa Barbara. The spill focused national attention on the need for coastal protection, resulting in the passage of the CZMA

in 1972 (16 U.S.C. § 1451 et seq.). *State of California v. Norton,* 311 F.3d. 1162 (9th Cir. 2002). The CZMA created a federal-state partnership. The main purpose of the CZMA is to encourage and assist coastal states in preparing and implementing coastal zone management programs to preserve, protect, develop and whenever possible restore the resources of the coastal zone of the United States. U.S. Code Congressional and Administrative News, 92nd Congress, Second Session, 1972 Volume 3, p. 4776. The CZMA is not an "attempt to diminish state authority through federal preemption"; instead, the "intent of the legislation is to enhance state authority by encouraging and assisting the states to assume planning and regulatory powers over their coastal zones." *Id.* The CZMA is designed to enhance, rather than narrow, a state's role in management of its coastal resources. *Acme Fill Corp. v. San Francisco Bay Conserv. & Dev. Com.,* 187 Cal.App.3d 1056 (1986).

The California Legislature passed the Coastal Act in 1976 providing for coastal regulation. Cal. Pub. Res. Code, § 30000 et seq. The Coastal Act created the Commission and designated it as the state agency responsible for implementing the state's authority under the CZMA. Cal. Pub. Res. Code, §§ 30300, 30330. In 1977, the acting Secretary of Commerce approved California's Coastal Management Program ("CCMP"), which includes the Coastal Act. *American Petroleum Institute v. Knecht,* 456 F. Supp. 889, 893-894 (CD. Cal. 1978), *aff'd* 609 F.2d 1306 (9th Cir. 1979). The Coastal Act contains the enforceable policies of the CCMP for purposes of the CZMA. Cal. Pub. Res. Code, § 30008.

When a coastal state, like California here, prepares a coastal zone management program that meets specific statutory goals and criteria, the federal government approves the program as the Secretary did in 1977 and gives the state the right to review development projects by a federal agency, any applicant's federally permitted and licensed activities, and federally funded activities

by local governments for consistency with the state management program that affect the coastal zone. 16 U.S.C. § 1456 (emphasis added). This review process is called Federal Consistency Review. A federal agency's compliance with the consistency review procedure is mandatory. *California Coastal Commission v. United States,* 5 F. Supp.2d 1106 (S.D. Cal. 1998). Congress intended the consistency provision to play a crucial role in motivating the states to cooperate with the federal government under the CZMA. *Southern Pacific Corp. v. California Coastal Commission,* 520 F. Supp. 800, 803 (N.D. Cal. 1981).

As noted herein, Del Mar asks for numerous conditions relating to NCTD rail operations under Federal Consistency Review in its Letter to the Commission. The Commission stated that it had undertaken this CZMA Federal Consistency Review with respect to the emergency bluff stabilization project because there was a federal permit or license involved. *See* 16 U.S.C. § 1456(c)(3)(a). This review remains active before the Commission. Moreover, NCTD will begin another coastal bluff project in Del Mar this year. This project in all likelihood will also be subject to Federal Consistency Review. Therefore, NCTD has strong concerns about whether Del Mar and the Commission will place onerous conditions on these crucial rail projects that will interfere with its rail operations.

While Del Mar has not written a similar letter to the Commission regarding its opposition to the safety fencing project described above, it has voted publicly to oppose it at a November 19, 2018 City Council meeting. (A copy of the Minutes from the City Council Meeting is attached hereto as Exhibit F). Moreover, nearly 2,000 individuals from Del Mar have signed a petition opposing the project. NCTD reasonably wants to eliminate any uncertainty about an anticipated Del Mar challenge to this project that will cost approximately $2 million to complete. At this time, the safety fencing project in the right-of-way does not involve any federal action and is funded

with state dollars. As a result, Federal Consistency Review should not apply here unless there is a federal action in the future, and the fencing project could only be subjected to a state or local challenge under the Del Mar LCP or the Coastal Act permitting regime.

**B) The California Coastal Act's Regulation of the Coastal Zone Outside of Federal Consistency Review Solely Consists of a State and Local Law Permitting Regime.**

In enacting the Coastal Act, the California Legislature focused on the avoidance of deleterious consequences of development on coastal resources. *Pacific Legal Foundation v. California Coastal Com.* 33 Cal.3d 158, 163 (1982); *CEEED v. California Coastal Zone Conservation Com.*, 43 Cal.App.3d 306, 321 (1974). The Supreme Court of California has described the Coastal Act as a comprehensive scheme to govern land use planning for the entire coastal zone of California. *Yost v. Thomas,* 36 Cal.3d 561, 565 (1984).

The Act's stated goals include the protection of the coastline and its resources and the maximization of public access and recreational opportunities. Cal. Pub. Res. Code § 30001.5, subd. (a) - (d); *Landgate, Inc. v. California Coastal Com.,* 17 Cal.4th 1006, 1011 (1998); *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 571 (1990). The Act is to be liberally construed to accomplish its purposes and objectives. Cal. Pub. Res. Code § 30009; *Ojavan Investors, Inc. v. California Coastal Com.,* 54 Cal.App.4th 373, 386 (1997).

Another stated goal of the Act is to "encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development" in the coastal zone. Cal. Pub. Res. Code, § 30001.5, subd. (e). To this end, the California Legislature required local governments to develop LCPs, comprised of a land use plan and implementing ordinances, for planning and regulating development in the coastal zone. The LCP strives to ensure planned, comprehensive development within the coastal zone with a view to preserving, where feasible, the

overall quality of the coastal zone environment and its natural and artificial resources. *Citizens of Goleta Valley v. Board of Supervisors, supra,* 52 Cal.3d at p. 571.

Under the Coastal Act's legislative scheme, the LCP and the development permits issued by local agencies pursuant to the Coastal Act are a matter of local law and embody state policy. *Charles A. Pratt Construction Co., Inc. v. California Coastal Com.*, 162 Cal. App. 4th 1068, 1075 (2008). The Commission's primary responsibility is the implementation of the Coastal Act. It is designated the state coastal zone planning and management agency for any and all purposes. Cal. Pub. Res. Code § 30330.

Procedurally, a local government prepares the LCP, Cal. Pub. Res. Code § 30500, subd. (a), which must be submitted for the Commission's approval. Cal. Pub. Res. Code § 30512, subd. (a). The Commission may certify the LCP only if it meets the requirements of and is in conformity with the policies of the Coastal Act. Cal. Pub. Res. Code § 30512, subd. (c). Zoning and other actions to implement the LCP must also be submitted to the Commission for approval. Cal. Pub. Res. Code § 30513. Once the Commission certifies the LCP and all implementing actions become effective, the Commission's authority over coastal development permits is "delegated to the local government." Cal. Pub. Res. Code § 30519, subd. (a). Finally, the Commission has appellate jurisdiction to determine whether the development permit issued by the local government is consistent with the LCP and coastal access policies. Cal. Pub. Res. Code § 30603, subd. (b).

Although local governments have the authority to issue coastal development permits, that authority is delegated by the Commission. The Commission has the ultimate authority to ensure that coastal development conforms to the policies embodied in the state's Coastal Act. In fact, a fundamental purpose of the Coastal Act is to ensure that state policies prevail over the concerns of local government. *See City of Chula Vista v. Superior Court,* 133 Cal.App.3d 472, 489 (1982)

(Commission exercises independent judgment in approving LCP because it is assumed statewide interests are not always well represented at the local level).

The CZMA "encourages state regulation of the coastal zone by granting funds for the implementation of approved state programs and subjecting activities affecting the coastal zone by federal agencies and licensees to 'consistency review' under § 1456. It does not otherwise federalize states' [Coastal] Management Programs. There is no doubt that Congress can, if it so chooses, enact federal requirements which incorporate state regulatory standards, *see, e.g., Chevron, U.S.A., Inc. v. Hammond,* 726 F.2d 483, 489–90 (9th Cir.1984) (Clean Water Act adopts state permit requirements), but nothing in the CZMA or in the NOAA's [National Oceanic and Atmospheric Administration ("NOAA")] regulations purports to 'convert' state Management Programs into federally mandated standards." *Granite Rock Co. v. California Coastal Com'n*, 590 F.Supp. 1361, 1371 (N.D. Ca. 1984) *rev'd on other grounds by* 768 F.2d 1077 (9th Cir. 1985). *See California Coastal Com'n v. Granite Rock Co.*, 480 U.S. 572 (1987); *Weaver's Cove Energy, LLC v. Rhode Island Coastal Resources Management Council*, 583 F.Supp.2d 259 (D.R.I. 2008) *aff'd by* 589 F.3d 459 (1st Cir. 2009). Rather, the Statement of Congressional Findings "encourage[s] the states to exercise *their full authority* over the lands and waters in the coastal zone." 16 U.S.C. § 1451(i).

In sum, the Commission and Del Mar apply state and local law and policies when deciding matters under this coastal permitting regime in California. The Commission only acts under federal law when it exercises Federal Consistency Review.

## ARGUMENT

As noted, Del Mar's request in its Letter regarding the emergency bluff stabilization project is in a Federal Consistency Review proceeding because of a federal permit or license as stated by the Commission. However, Federal Consistency Review should not apply to Del Mar's opposition to the safety fencing project, as there is no federal action to date, and should only involve state and local law under the Coastal Act's permitting regime as discussed above. Moreover, it remains uncertain whether Federal Consistency Review will apply to all future bluff stabilization projects that NCTD will undertake in the future. It certainly will not apply to all future rail maintenance and upgrade projects that NCTD will undertake in its right-of-way. As a result, NCTD has urgent concerns about the application of this coastal permitting regime to its rail right-of-way projects in California under local, state and federal law depending on the circumstances.

The application of this Coastal Act permitting regime under state and local law to rail operations is clearly preempted here based on the STB's 2002 decision regarding NCTD's previous request for a declaratory order and on other well-established ICCTA-preemption precedent. However, the Commission consistently and strongly takes the position that this axiomatic reading of state and local preemption law by the STB is incorrect.

In reviewing past consistency certifications for SANDAG (and North County Transit District (NCTD)) LOSSAN corridor double-track and bridge replacement projects, the Commission has noted a historic jurisdictional disagreement between the rail proponents and the Commission over whether the projects were subject to the state law coastal development permit requirement, or whether state law was preempted by the Interstate Commerce Termination Act of 1995, 49 U.S.C. §§ 10101 *et seq.* and past court decisions applying it. At the same time, the

Commission historically agreed to "set aside" such disagreements where the projects are still reviewable through the federal consistency process and rely on that procedure. Adopted Findings from CC-0001-18 (SANDAG, Eastbrook to Shell Double Track Railroad Project, City of Oceanside, San Diego County) (attached hereto as Exhibit G).[8] Because of this blatant disregard of STB and federal court precedent by the Commission, NCTD is compelled to bring this Petition because the aforementioned safety fencing project and other rail maintenance and upgrading projects in the near future will not be subject to the CZMA Federal Consistency Review due to there being no federal action. Therefore, this "historic disagreement between rail proponents and the Commission" regarding preemption will soon be at issue. NCTD now wants to ensure that it can move forward with these crucial projects without unnecessarily having to go through this onerous state and local coastal permitting review and/or some other type of preemption litigation that may delay the work.

Moreover, even when Federal Consistency Review applies to an NCTD rail maintenance or upgrade project based on a federal action, this incredibly burdensome permitting process under federal law would create an irreconcilable conflict with the ICCTA's rail regulation and would interfere unreasonably with interstate commerce, thereby overriding the CZMA federal regulation over rail operations of this nature.

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[8] While NCTD has been compliant with this tacit agreement to avoid preemption battles in the past, it now believes that it must assert its position regarding preemption under the ICCTA with respect to the Commission's state and local permitting regime and the CZMA Federal Consistency Review. Complying with this complex regulatory scheme for every maintenance and upgrade project in NCTD's right-of-way has become extremely onerous and is defeating rail operations. Moreover, the Letter from Del Mar asking to move the rail line inland was extremely concerning, and NCTD felt it had no other options available other than to settle this preemption dispute by seeking declaratory relief from the STB.

### 1) Summary of ICCTA Preemption Under 49 U.S.C. § 10501(b).

The Interstate Commerce Act is "among the most pervasive and comprehensive of federal regulatory schemes." *Chi. & N.W. Transp. Co. v. Kalo Brick & Tile Co., 450 U.S. 311, 318 (1981).* The preemption provision of the Act, as broadened by the ICCTA, expressly provides that the jurisdiction of the Board over "transportation by rail carriers" is "exclusive." 49 U.S.C. § 10501(b). The statute defines "transportation" expansively to encompass "a locomotive, car, ... yard, property, facility, instrumentality, or equipment of any kind related to the movement of passengers or property, or both, by rail" as well as "services related to that movement." 49 U.S.C. § 10102(9). Moreover, "railroad" is defined broadly to include "a switch, spur, track, terminal, terminal facility, freight depot, yard, and ground, used or necessary for transportation." 49 U.S.C. § 10102(6). Section 10501(b) expressly provides that "the remedies provided under [49 U.S.C. §§ 10101-11908] with respect to regulation of rail transportation are exclusive and preempt the remedies provided under federal or state law." Section 10501(b) thus is intended to prevent a patchwork of local regulation from unreasonably interfering with interstate commerce. *See Norfolk S. Ry.—Pet. for Declaratory Order*, FD 35701, slip op. at 6 & n.14 (STB served Nov. 4, 2013).

The courts and the Board have emphasized the importance of national uniformity in laws governing rail transportation when interpreting § 10501(b). *See Fayus Enters. v. BNSF Ry.,* 602 F.3d 444, 452 (D.C. Cir. 2010) (finding that application of state antitrust laws to rail transportation would "subject [shipments] to fluctuating rules as they crossed state lines" and therefore "directly interfere" with the purpose of § 10501(b)); *CSX Transp., Inc.—Pet. for Declaratory Order*, FD 34662, slip op. at 11 (STB served March 14, 2005), *recons. denied* (STB served May 3, 2005) (finding local regulation regarding routes for rail transportation of hazardous materials through the

District of Columbia preempted because such regulation would interfere with interstate commerce and lead to piecemeal regulation, subverting the purpose of § 10501(b)).

When examining state or local action affecting rail transportation, preemption under § 10501(b) may be categorical or "as applied." *Grafton & Upton R.R.— Pet. for Declaratory Order*, FD 35779, slip op. at 4-5 (STB served Jan. 27, 2014). Categorically preempted actions are preempted "regardless of the context or rationale for the action." *CSX Transp., Inc.—Pet. for Declaratory Order*, slip op. at 3 (STB served May 3, 2005). The Board and the courts have found that § 10501(b) categorically prevents states or localities from intruding into matters that are directly regulated by the Board (e.g., rail carrier rates, services, construction, and abandonment). It also categorically prevents states and localities from imposing requirements that, by their nature, could be used to deny a rail carrier's ability to conduct rail operations. **Thus, state or local permitting or preclearance requirements, including zoning ordinances and environmental and land use permitting requirements, are categorically preempted as to any facilities that are an integral part of rail transportation.** *See Green Mountain R.R. v. Vermont*, 404 F.3d 638, 643 (2d Cir. 2005) (emphasis added).

Other state or local actions may be preempted "as applied"—that is, only if they would have the effect of unreasonably burdening or interfering with rail transportation, which is a fact-specific determination based on the circumstances of each case. *See N.Y. Susquehanna & W. Ry. v. Jackson,* 500 F.3d 238, 252 (3d Cir. 2007) (federal law preempts "state laws that may reasonably be said to have the effect of managing or governing rail transportation, while permitting the continued application of laws having a more remote or incidental effect on rail transportation"); *Joint Pet. for Declaratory Order—Bos. & Me. Corp. & Town of Ayer* ("*Ayer*"), 5 S.T.B. 500 (2001), *recons. denied* 5 S.T.B. 1041 (2001); *Borough of Riverdale—Pet. for Declaratory Order—*

*N.Y. Susquehanna & W. Ry.,* FD 33466, slip op. at 2 (STB served Feb. 27, 2001); *Borough of Riverdale—Pet. for Declaratory Order— N.Y. Susquehanna & W. Ry.*, 4 S.T.B. 380, 387 (1999).

The Board has stated that federal environmental statutes such as the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act are generally outside the scope of § 10501(b) preemption, unless the federal environmental laws are being used to regulate rail operations directly or being applied in a discriminatory manner against railroads. *E.g., Grafton & Upton R.R.—Pet. for Declaratory Order*, FD 35779, slip op. at 6. The Board also has acknowledged state and local agencies' role in enforcement of federal environmental statutes and has stated that § 10501(b) is not generally intended to interfere with that role. *Ayer*, 5 S.T.B. at 508. However, actions taken, and regulations enacted under federal environmental statutes or other federal statutes may directly conflict with the purposes and regulatory scheme under the Interstate Commerce Act. When such a conflict occurs, the Board or a court must determine whether the two (2) federal statutes and their applicable regulatory schemes can be "harmonized." *Assn of American Railroads v. South Coast Air Quality Management Dist.*, 622 F.3d 1094, 1097-98 (9th Cir. 2010); *Ayer*, 5 S.T.B. at 509 n.28 (two federal statutes should be "harmonized" unless there is a "positive repugnancy" or "irreconcilable conflict" between them).

As explained herein, the Commission's above-noted position that NCTD is subject to state and local permitting requirements under the Coastal Act when Federal Consistency Review does not apply to rail projects in NCTD's right-of -way clearly is wrong. This type of state and local permitting is "categorically" preempted by § 10501(b) because this state and/or local interference would defeat NCTD's ability to conduct its rail operations. Moreover, even when the CZMA Federal Consistency Review is applicable to rail maintenance and upgrading projects, these two

(2) statutes cannot possibly be "harmonized" here because the result would be in direct conflict with the ICCTA and its regulatory scheme.

### A. This Is Not the First Time NCTD Has Had to Bring a Petition for a Declaratory Order to the Board to Engage in Needed Rail Work on the Line Because a Coastal City Challenged Its Right to Do So under the Coastal Act's Permitting Regime.

By petition filed on October 11, 2001, NCTD asked that the STB institute a declaratory order proceeding and determine that the City of Encinitas, CA (Encinitas/City) is prohibited from requiring NCTD to obtain a local permit or other prior approval in order to construct a passing track on the Line. *North San Diego County Transit Development Board – Petition for Declaratory Order*, FD No. 34111 (STB served Aug. 21, 2002). In this proceeding, NCTD intended to construct a passing track on the Line which would permit BNSF trains to pull over while allowing faster, more time sensitive passenger trains to pass and get to their destination on time.

The Board explained that the Coastal Act, "a California state law, requires that NCTD apply for and obtain a Coastal Development Permit from the City in order to construct the passing track. *See* Cal. Public Resources Code § 30600(a), (d) (Deering 2001)." Slip op. at 2. NCTD applied for such a permit in accordance with state law. After public hearings on NCTD's request, the City's planning commission determined that preparation of an environmental report would be required prior to construction. NCTD appealed this determination on October 10, 1997, to the City Council of Encinitas, but abandoned the appeal on February 20, 1998, before it was heard. On July 19, 2001, stating that it feared the loss of state funds for the project, NCTD's board voted to proceed with construction of the passing track without the permit. Slip op. at 2-3. This decision eventually led NCTD to seek the STB's guidance on preemption of this state and local coastal permitting regime under the Coastal Act in a declaratory order proceeding.

In August 2001, prior to NCTD's filing of its request for a declaratory order, Encinitas filed an action with the San Diego County Superior Court seeking declaratory and injunctive relief preventing NCTD from building the passing track until it fulfilled the state permitting requirement. On September 26, 2001, NCTD had the state court action removed to the United States District Court for the Southern District of California. On January 14, 2002, the District Court issued a decision finding that the City's permitting process is preempted by 49 U.S.C. § 10501(b), as broadened by the ICCTA, and dismissing the action with prejudice for lack of subject matter jurisdiction. *See City of Encinitas v. North San Diego County Transit Development Board, et al.*, Case No. 01-CV-1734-J (AJB) (*City of Encinitas*).[9]

The STB agreed with the *City of Encinitas* decision and found the Coastal Act permitting requirements to be preempted by the ICCTA. The STB explained:

> As the court in *City of Encinitas* observed, "[c]ourts have interpreted [section 10501(b)] broadly, since '[i]t is difficult to imagine a broader statement of Congress' intent to preempt state regulatory authority over railroad operations.'" *City of Encinitas*, slip op. at 5, citing *CSX Transp., Inc. v. Georgia Public Service Com'n*, 944 F. Supp. 1573, 1581 (N.D. Ga. 1996).
>
> In addressing the scope of section 10501(b), the courts have found no basis for distinguishing between "economic" and "environmental" regulation, stating that:
>
> **if local authorities have the ability to impose 'environmental' permitting regulations on the railroad, such power will in fact amount to 'economic**

[9] 2002 WL 34681621 (S.D. Ca. 2002).

**regulation' if the carrier is prevented from constructing, acquiring, operating, abandoning, or discontinuing a line.**

*City of Encinitas*, slip op. at 6, citing *City of Auburn v. United States*, 154 F.3d 1025 (9th Cir. 1998), *cert. denied*, 527 U.S. 1022 (1999) (*City of Auburn*). Thus, as the court in *City of Encinitas* explained (slip op. at 6):

> If the Court were to allow Encinitas to impose environmental or permit regulations upon NCTD operations, NCTD might be prevented from constructing the passing track. Such action would be tantamount to economic regulation by a local government over a rail carrier. The ICCTA demonstrates Congress' intent to preempt such regulatory authority over railroad operations and to vest jurisdiction over these claims exclusively in the STB. Accordingly, the Court finds that [the City's] claims are preempted by the ICCTA.

We have repeatedly held that state or local laws that would impose a local permitting or environmental process as a prerequisite to the **railroad's maintenance, use, or upgrading of its facilities** are preempted to the extent that they set up legal processes that could frustrate or defeat railroad operations because they would, of necessity, impinge upon the federal regulation of interstate commerce. *See Cities of Auburn and Kent, WA*, 2 S.T.B. 330 (1997), *aff'd, City of Auburn; Borough of Riverdale*, STB Finance Docket No. 33466 (STB served Sept. 10, 1999) at 8; *Friends of the Aquifer*, STB Finance Docket No. 33966 (STB served Aug. 15, 2001) at 4 n.8.

State and local environmental regulation has been found to be preempted in those cases where the Board has licensing authority over railroad activities, as well as where it

does not. The Board has regulatory authority over rail line constructions under 49 U.S.C. 10901, and it conducts an environmental review of such activities under the National Environmental Policy Act (NEPA) and can adopt appropriate environmental mitigation conditions in response to concerns of the parties, including local authorities. *See Joint Petition for Declaratory Order — Boston and Maine Corporation and Town of Ayer, MA*, STB Finance Docket No. 33971 (STB served May 1, 2001) (*Ayer*) at 4, n.14. Even in situations that do not require a Board license — for example, a carrier building or expanding facilities that assist the railroad in providing its existing operations but that do not give the carrier the ability to penetrate new markets, or constructing ancillary tracks and facilities excepted from the Board licensing requirement by 49 U.S.C. 10906 — in which the Board therefore does not conduct its own environmental review, the courts have held that the express statutory preemption of Section 10501(b) applies. *See Flynn v. Burlington N. Santa Fe Corp.*, 98 F. Supp.2d 1186 (E.D. Wash. 2000) (*Flynn*); *Ayer* at 8; *Riverdale I* at 5-9; *Borough of Riverdale — Petition for Declaratory Order — The New York Susquehanna and Western Railway Corporation*, STB Finance Docket No. 33466 (STB served Feb. 27, 2001) (*Riverdale II*) at 3; *Friends of the Aquifer* at 4.

Here, as in *Stampede Pass* and *Ayer*, the City seeks to require that NCTD apply for and obtain an environmental permit and other pre-approvals as a prerequisite to building a passing track. As the court found in *City of Encinitas*, these state permitting requirements are preempted because, otherwise, the City could deny NCTD the right to proceed with its construction project, thus frustrating NCTD's proposal to construct a passing track that would benefit not only it and Amtrak but interstate freight carrier BNSF as well.

*North San Diego County Transit Development Board,* slip op. at 7-9 (footnotes omitted) (emphasis added). *See also Boston and Maine Corp. and Springfield Terminal R.R. Co.—Petition for Declaratory Order*, FD 35749, slip op. at 3 (STB served July 19, 2013) (zoning decisions issued by the town which would ban freight rail transportation to a warehouse in the town, are preempted by federal law); *Delaware v. STB*, 859 F.3d 16 (D.C. Cir. 2017); *CSX Transp., Inc.—Petition for Declaratory Order*, FD 34662, slip op. at 10 ("[r]egulating when and where particular products may be carried by rail . . . would constitute direct regulation of railroad activities" that is prohibited by ICCTA).

As discussed above, when Federal Consistency Review under the CZMA does not apply and only state and local permitting is at issue under the Coastal Act, this decision by the Board regarding NCTD's previous request for a declaratory order under circumstances that probably would be even more impactful on a coastal zone clearly ends the discussion here about preemption under § 10501(b). Both situations involve California coastal state or local permitting requirements that would frustrate NCTD's rail operations. In fact, a requirement for permits here to make the track usable and safe would have even greater effect on NCTD and BNSF because they might not be able to operate at all if NCTD is required to obtain state or local approval before these types of projects can be undertaken. Therefore, the result is the same: state and local coastal permitting and control of the bluffs rail maintenance projects or rail safety fencing construction projects are clearly preempted like the Board found in this previous NCTD declaratory order case.

### B. The Board Does Not Need to Consider How the State and Local Coastal Permitting Regime Affects NCTD's Rail Operations Because It Is Categorically Preempted Here.

"[T]he congressional intent to preempt this kind of state and local [permitting] regulation of rail lines is explicit in the plain language of the ICCTA and the statutory framework surrounding

it." *City of Auburn*, 154 F.3d at 1031. For this reason, it is well settled that Section 10501(b) categorically preempts requirements to obtain permits or other review before engaging in activity regulated by the STB as noted herein. *See, e.g., City of Auburn*, 154 F.3d at 1029-31 (state and local permitting laws regarding railroad operations are preempted by plain language of Interstate Commerce Commission Termination Act); *Franks Inv. Co. v. Union Pac. R.R. Co.*, 593 F.3d 404, 410 (5th Cir. 2010) (any form of state or local permitting or preclearance that, by its nature, could be used to deny a railroad the ability to conduct some part of its operations or to proceed with activities that the Board has authorized by its very nature is "unreasonable interference with interstate commerce" and must be preempted); *Norfolk Southern Ry. Co. v. City of Alexandria*, 608 F. 3d 150 (4th Cir. 2010) (a local ordinance regarding truck traffic that may reasonably be said to have the effect of "managing" or "governing" rail transportation is preempted).

For example, under nearly identical circumstances, in *Green Mountain R.R.*, 404 F.3d 638, the railroad sought to build a transloading facility on its property in Vermont. Some of these operations would be conducted alongside the railroad's track and the Connecticut River. Vermont claimed that construction of these transloading facilities was subject to a state environmental land use statute ("Act 250"). During these state permit proceedings, the railroad objected claiming that the State Environmental Commission lacked jurisdiction to adjudicate the pending permit application because the ICCTA expressly preempted these activities. The railroad brought suit in federal district court which found the state's efforts to enforce this state environmental law to be preempted under the ICCTA. The state appealed this decision and the appellate court affirmed the decision. The First Circuit found "[l]ike the regulations and ordinances consistently struck down by federal courts and by the Transportation Board, Act 250 mandates a pre-construction permit. Act 250's pre-construction permit requirement is preempted for two (2) reasons: (i) it 'unduly

interfere[s] with interstate commerce by giving the local body the ability to deny the carrier the right to construct facilities or conduct operations, '*Town of Ayer,* STB Finance Docket No. 33971, 2001 WL 458685, at *5; and (ii) it can be time-consuming, allowing a local body to delay construction of railroad facilities almost indefinitely. *Green Mountain R.R. Corp.,* 2003 U.S. Dist. LEXIS 23774, at *13." *Id.* at 643. The court explained:

> The State argues that Act 250 withstands preemption because it is an environmental, rather than economic, regulation. The distinction is not useful. *** Green Mountain serves industries that rely on trucks to transport goods from the rail site for processing; so the proposed transloading and storage facilities are integral to the railroad's operation and are easily encompassed within the Transportation Board's exclusive jurisdiction over "rail transportation." Notwithstanding the environmental goals of the legislation, Act 250's permitting process "necessarily interfere[s]" with Green Mountain's "ability to construct facilities and conduct economic activities." *Green Mountain R.R. Corp.,* 2003 U.S. Dist. LEXIS 23774, at *13.

*Id.* at 644-45.

Thus, the Board need not consider in this proceeding about railroad maintenance and safety projects how these state and local permitting requirements under the Coastal Act would burden NCTD's rail operations. These types of requirements in this situation would directly regulate rail operations and are therefore categorically preempted. *See, e.g., Ass'n of American Railroads v. South Coast Air Quality Mgmt. Dist.*, 2007 WL 2439499, at *7 (C.D. Cal. Apr. 30, 2007) ("Because the Rules directly regulate rail operations such as idling, they are preempted without regard to whether they are undue or unreasonable."); *CSX Transp., Inc.—Petition for Declaratory*

*Order*, FD 34662, slip op. at 3-4 (STB served May 3, 2005) ("[T]he preemption analysis is addressed not to the reasonableness of the particular state or local action, but rather to the act of regulation itself."). Accordingly, any type of coastal zone regulation of the NCTD right-of-way here whether under state or local law would be preempted by the ICCTA because it would directly conflict with the Board's regulatory authority over NCTD's rail operations. *See Ass'n of American Railroads*, at *7.

Specifically, state or local permitting or review of rail maintenance or upgrades in the rail right-of-way in the coastal zone would directly impact rail transportation along the entire California coastline and more broadly, along the coast of all 34 states that have the CZMA coastal management plans. If any railroad needed to engage in a maintenance or an upgrade project, like in this situation, that was in a regulated coastal zone, it would have to obtain a permit before beginning such a project when the Coastal Act's state and local permitting regime is found to be applicable. Therefore, if the maintenance project is an emergency repair needed to make the rail line usable or safe, the railroad may not even be able to operate on the rail line until it received a permit or review from the appropriate agency like the Commission or Del Mar. Moreover, a permit that was denied or delayed here for rail line safety fencing would also result in a railroad's inability to prevent tragic accidents that would shut down rail service on the Line and could have onerous financial implications from possible lawsuits.

State and local coastal permitting authorities could require railroads to undergo a lengthy permit or review process that could render interstate rail operations in coastal areas all but impossible. Because railroads are continually maintaining and upgrading their lines, review of each maintenance or upgrade project would be a perpetual process possibly requiring new cases for the Commission and/or local government every day. Permits or review of rail maintenance or

upgrade projects would impose requirements directly on how railroads operate and amount to unworkable, direct regulation of rail operations that cannot be reconciled with ICCTA's central service obligations.

Therefore, the Commission's position that it or local governments can regulate NCTD's maintenance and upgrading of its rail line under the state and local coastal law must be rejected. This regulation is "categorically" preempted because this state and local coastal permitting regime would deny NCTD's ability to conduct rail operations.

### C. Coastal Permitting or Preclearance for Rail Maintenance or Upgrades Would Create an Impermissible and Unworkable Patchwork of Regulation of Rail Maintenance/Upgrades.

As explained above, each coastal city in California has its own LCP approved by the Commission under the Coastal Act. Moreover, each coastal state has its own Coastal Management Plan approved by the Secretary of Commerce under the CZMA. (Currently, 34 states participate in the CZMA.) Any railroad that operates a rail line along the coast could be subject to an extraordinary number of compliance obligations under this extensive regulatory regime, many of which could conflict with one another. Coastal permitting of rail property that varies by state or even by city would create an impermissible and unworkable patchwork of regulations that unreasonably would burden interstate commerce. *See United States Environmental Protection Agency—Petition for Declaratory Order*, FD 35803, slip op. at 8 (STB served Dec. 30, 2014) (providing guidance in the Clean Air Act context that subjecting locomotives "'to fluctuating rules as they cross[] state lines' (and as they cross air quality regions) . . . would likely 'directly interfere' with the purpose of § 10501(b)") (quoting *Fayus Enters.*, 602 F.3d at 452). Interstate passenger and freight routes often run along the coast commonly passing through multiple states and cities. Such a variety of localized regulations would certainly have a "practical and cumulative impact"

on rail operations on the national rail network. *See CSX Transp., Inc. v. Williams*, 406 F.3d 667, 673 (D.C. Cir. 2005). As discussed herein, a major objective of ICCTA preemption is "to prevent a patchwork of local regulation from interfering with interstate commerce." *Wichita Terminal Assn BNSF Ry. Co. & Union Pac. R.R. Co.—Petition for Declaratory Order*, FD 35765 (STB served June 23, 2015). "[T]he Federal scheme of economic regulation and deregulation is intended to address and encompass all such regulation and to be completely exclusive. Any other construction would undermine the uniformity of Federal standards and risk the balkanization and subversion of the Federal scheme of minimal regulation for this intrinsically interstate form of transportation." H.R. Rep. No. 104-311, at 95-96 (1995), reprinted in 1995 U.S.C.C.A.N. 793, 808.

If a railroad had to comply with this wide variety of state and local laws for each maintenance or upgrade project that it undertook along the coast, compliance would be all but impossible as it tried to conform its right-of-way maintenance/upgrade practices to each area instead of to its interstate network. This result is exactly what § 10501(b) was meant to stop and why any state and local regulation of NCTD's rail operations along the coast under the Coastal Act and LCPs must be "categorically" preempted.

**d. Even When the CZMA Federal Consistency Review Is Applicable to an NCTD Rail Project, It Clearly Cannot Be "Harmonized" with the ICCTA Here and Regardless, the Commission's CCMP State Policies Would Be Preempted by the ICCTA.**

The Office for Coastal Management ("OCM") of NOAA provided clarity regarding the CZMA federal consistency, specifically addressing preemption by federal laws like the ICCTA:

> Federal preemption is the principle, derived from the Supremacy Clause of the Constitution, that a federal law can supersede or supplant any inconsistent state law or regulation. Preemption applies to state law and not other federal law. OCM's long-

standing interpretation of the definition of "enforceable policy" under the CZMA (16 U.S.C. § 1453(6a)) is that if a state policy specifically seeks to regulate an activity where state regulation is preempted by federal law, it is not legally binding under state law and would not be an enforceable policy under the CZMA. For example, North Carolina sought to regulate low level aircraft in flight by adopting policies that imposed minimum altitude and decibel levels, and other overflight restrictions. OCM denied the state's request to incorporate these policies into the North Carolina CMP because the policies were, on their face, preempted by federal law administered by the Federal Aviation Administration.

Applicability Consideration: Under the federal consistency authority, states apply NOAA-approved enforceable policies to federal actions. If a state's enforceable policies, **as described or applied**, are not preempted, the state may apply them through CZMA federal consistency to a preempted field. It should be noted that whether state action is preempted is a fact-specific inquiry.

NOAA OCM, *CZMA Federal Consistency Overview,* at 6-7 (Feb. 24, 2020)(emphasis added)(citing 15 C.F.R. § 923.84(b)("In order for NOAA to approve the incorporation of a new or revised enforceable policy into a state's management program, the policy shall: *** (5) Not be preempted by Federal law. If a state policy is preempted by Federal law, the policy is not legally binding under state law and shall not be an enforceable policy under 16 U.S.C. 1453(6a). Policies previously approved by NOAA as enforceable policies shall no longer be enforceable if Federal law enacted after NOAA's approval preempts the state policy.") (*Overview* attached hereto as Exhibit H).

In a rulemaking that addressed this preemption policy, NOAA recently explained in its Final Rule regarding changes to coastal management plans:

> Even though states review Federal actions under the CZMA Federal consistency authority (a Federal law requirement), the states apply their CZMA enforceable policies, which are based on state law, to review Federal actions. NOAA does not believe that the CZMA Federal consistency authority or NOAA's approval of state enforceable policies for incorporation into state management programs, removes the application of Federal **preemption** to the state enforceable policies. The application of the Federal **preemption** doctrine to the CZMA and state enforceable policies as described in the proposed rule and in this final rule is NOAA's long-standing position and does not represent a change in NOAA's view or how NOAA would review state CZMA program changes under the revised regulations. NOAA believes that its application of Federal **preemption** to state CZMA enforceable policies is required by the definition of "enforceable policy" in CZMA section 304(6a) [16 U.S.C. § 1453(6a)] (must be legally binding under state law).

*Coastal Zone Management Act Program Changes Procedures (Final Rule),* 84 FR 38118-01, at 38128 (NOAA issued Aug. 6, 2019). Congress in 1972 made clear that enactment of the CZMA did not diminish, modify or supersede this preexisting federal authority. 16 U.S.C. § 1456(e).

Therefore, when the CZMA Federal Consistency Review is applicable to a rail maintenance or upgrade project because it involves a federal action, any coastal policy or the application of it under the CCMP that would be preempted by the ICCTA would not be enforceable under this federal coastal regulatory regime. As explained herein regarding the clear federal preemption of this state and local coastal permitting regime, any application of the CCMP policies to rail maintenance or upgrades by NCTD in its right-of-way would clearly be preempted.

Moreover, applying these California laws to any requirement by the Commission as requested by Del Mar to move the track off the bluffs inland would without question be preempted. Therefore, the Commission cannot apply these preempted state policies in the CZMA Federal Consistency Review to these types of crucial rail activities in the coastal zone in Del Mar based on NOAA's reading of 16 U.S.C. § 1453(6a). *See* 15 C.F.R. § 923.84(b).

Even assuming that these CCMP policies can be applied to these NCTD rail operations in some fashion, it is clear that the CZMA federal review of these crucial NCTD rail operations is irreconcilable with the ICCTA rail statutory scheme and these two (2) statutes cannot be "harmonized." As discussed, the CZMA is part of a federal scheme allowing state review of federal actions that have effects on state coastal uses or resources. Therefore, any time there is a federal action relating to NCTD's rail operations as discussed herein, the Commission could claim Federal Consistency Review is required before any work can begin. *See Southern Pacific Transportation Co.*, 520 F.Supp. at 805 (there is no explicit "affirmative showing of an intention to repeal" the CZMA federal consistency provision in whole or in part in the Interstate Commerce Act). *See, e.g., Boston and Maine Corporation – Abandonment – in Suffolk County, MA ("Boston & Maine")*, AB-32 (Sub-No. 92) (STB served Dec. 21, 2001) Therefore, it has been held that the CZMA must be given effect so long as the CZMA and the ICCTA are not irreconcilable and the CZMA does not stand as an obstacle to the objectives of the ICCTA. *Id.*

In *Boston & Maine,* regarding the abandonment of a railroad line in Massachusetts, NOAA found, and the STB concurred, that the CZMA process and the applicant's compliance with the state's enforceable policies were not preempted by the ICCTA. The Massachusetts Office of Coastal Zone Management ("CZM") submitted a comment indicating that the line is located within the Massachusetts coastal zone and that the proposed abandonment could have an adverse effect

on coastal resources or uses. CZM indicated that it was seeking approval from the United States Department of Commerce, Office of Ocean and Coastal Resource Management ("OCRM") to review the proposed abandonment under the CZMA. Under the CZMA, the STB stated that it was prohibited from granting a license or permit affecting a coastal zone until it received a consistency certification from a state.

In a letter, OCRM approved CZM's request to review Boston and Maine's ("B&M") proposed abandonment under the CZMA. The OCRM advised CZM that its decision must be consistent with the Board's decision in *Ayer, supra*. At the Board's Section of Environmental Analysis's ("SEA") request, the STB imposed a condition prohibiting B&M from performing any salvage activities until it completes a CZMA consistency certification and notifies SEA of the completion. Obviously, in this instance, applying the CZMA to a rail abandonment would have no impact on rail operations because they were being shut down, unlike here where the CZMA review of rail maintenance and upgrades in the right-of-way could bring NCTD's active rail operations to a standstill.

In *Ayer,* the STB provided:

> Finally, nothing in section 10501(b) is intended to interfere with the role of state and local agencies in implementing Federal environmental statutes, such as the Clean Air Act, the CWA, and the SDWA. See Stampede Pass, 2 I.C.C.2d at 337 & n.14; Riverdale I at 7. Thus, the lack of a specific environmental remedy at the Board or under state and local laws (as to construction projects such as this, over which the Board lacks licensing power) does not mean that there are no environmental remedies under other Federal laws.

> Of course, whether a particular Federal environmental statute, local land use restriction, or other local regulation is being applied so as to not unduly restrict the railroad from conducting its operations, or unreasonably burden interstate commerce, is a fact-bound question. Accordingly, individual situations need to be reviewed individually to determine the impact of the contemplated action on interstate commerce and whether the statute or regulation is being applied in a discriminatory manner, or being used as a pretext for frustrating or preventing a particular activity, in which case the application of the statute or regulation would be preempted.

5 S.T.B. at 508.

As discussed herein, actions taken, and regulations enacted under federal environmental statutes or other federal statutes may directly conflict with the purposes and regulatory scheme under the Interstate Commerce Act. When such a conflict occurs, the Board or a court must determine whether the two (2) federal statutes and their applicable regulatory schemes can be "harmonized." *Ass'n of American Railroads v. South Coast Air Quality Management Dist.*, 622 F.3d 1094, 1097-98 (9th Cir. 2010); *Ayer*, 5 S.T.B. at 509 n.28 (two federal statutes should be "harmonized" unless there is a "positive repugnancy" or "irreconcilable conflict" between them). Therefore, under this standard, it would be necessary to determine whether Federal Consistency Review of rail maintenance (bluff stabilization) and upgrade (safety fencing) projects needed to continue rail service and the requested condition by Del Mar to move the rail line to accommodate its citizen's access to the beach possibly can be "harmonized" with the ICCTA.

In this circumstance, "harmonization" of the ICCTA and the CZMA would merely result in the ICCTA being disregarded and the CZMA Federal Consistency Review being applied. First,

assuming the Commission required Federal Consistency Review before NCTD would be permitted to fix its rail line in the coastal zone or imposed unreasonable conditions (like the movement of the Line off the bluffs as requested by Del Mar and supported by the Commission), a shipper on the Line, that did not receive adequate service due to the CZMA review process, could bring a case to the STB alleging a violation of NCTD's or BNSF's common carrier obligation under 49 U.S.C. § 11101(a). Of course, any dispute regarding a railroad's common carrier obligation would have to be under the jurisdiction of the Surface Transportation Board—a result that clearly demonstrates why preemption must apply, as it is not for the state effectively to instruct NCTD when it can operate its rail line. *See BNSF Railway Company v. California State Board of Equalization,* 2016 WL 6393507, *3 (N.D. Ca. 2016). Therefore, Federal Consistency Review of maintenance work like the bluffs project that blatantly interferes with a railroad's common carrier obligation cannot be "harmonized" with the ICCTA.

Similarly, if Federal Consistency Review of the safety fencing project was required, this regulation again would directly interfere with NCTD's rail operations by making them less safe. It would be impossible to "harmonize" NCTD's need to operate safely with the CZMA Federal Consistency Review without risking the loss of life which tragically occurs often along this rail corridor. As discussed in the FRA's Report, this fencing is crucial to stopping accidents involving rail trespassers. Without the fencing, NCTD would take the substantial risk that the injured or killed trespassers could bring litigation, claiming NCTD failed to install this safety aid knowing it was crucial to protecting the public. Also, as noted herein, there have been 174 trespasser incidents in this corridor over the past ten years causing a disruption to rail service each time. This high-density corridor cannot afford to have this constant disruption of rail service due to trespasser incidents without eventually causing rail shippers to have their freight service delayed consistently.

This constant delay again could result in a shipper alleging NCTD is not meeting its common carrier obligation and bringing a case to the STB. Again, it is not for the state to decide whether rail shippers should receive adequate rail service by essentially controlling vital rail projects in the right-of-way. Therefore, again, Federal Consistency Review and the ICCTA cannot be harmonized here.

This argument is even stronger with respect to Del Mar's request to the Commission to decide whether to move the rail line itself (a request that the Commission has supported in the press and public discussion). The STB is the only agency with jurisdiction over the abandonment and construction of rail lines. *See* 49 U.S.C. §§ 10901, 10903. "Harmonization" of Federal Consistency Review with the ICCTA could not be possible in this situation as well because states cannot have the power to control whether active rail lines can be moved which is solely subject to the jurisdiction of the STB. *See, e.g., Coastal Zone Management Act Program Change Procedures,* 84 FR at 38127 ( "NOAA could not approve a state proposed policy that regulates the siting of onshore liquefied natural gas (LNG) terminals regulated by the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act, since FERC has exclusive jurisdiction over the siting of onshore LNG terminals and states are federally preempted from regulating the siting of LNG terminals. Such a policy could not be legally binding under state law, as required by the CZMA definition of enforceable policy in CZMA section 304(6a).") Likewise, it is not for the state to decide where an active rail line should be located but is only for the STB to determine, thereby again making harmonization impossible.

Moreover, as discussed herein, the STB has previously ruled in similar circumstances involving a conflict between the federal Clean Air Act and the ICCTA that "harmonization would not be possible under § 10501(b) if the result was a patchwork of environmental regulations that

impacted the railroad. *United States Environmental Protection Agency—Petition for Declaratory Order*, FD 35803, slip op. at 8. If each state Coastal Commission (34 in all) were able to control how railroads maintained or upgraded their lines in coastal areas and where an active rail line should be located, "this type of regulation would be preempted because of the potential patchwork of regulations that could result, contravening Congress's purpose in enacting § 10501(b)." *Id.* If this type of coastal regulation was permitted, railroads would be subject "to fluctuating rules as they cross[] state lines", and Federal Consistency Review would therefore "directly interfere" with the purpose of § 10501(b). *See Fayus Enters.*, 602 F.3d at 452. This differing regulation in 34 states would lead to the lack of uniformity of regulation that Congress intended to preclude in § 10501(b). Such a variety of localized regulations would likely have a "practical and cumulative impact" on rail operations throughout the national rail network. *See CSX Transp., Inc. v. Williams*, 406 F.3d 667, 673 (D.C. Cir. 2005).

Federal Consistency Review under these circumstances would unduly restrict NCTD and BNSF from conducting their rail operations and would unreasonably burden interstate commerce in contravention of the ICCTA. Railroads must constantly maintain and upgrade their rail lines in order to provide service to their customers across the United States. Maintenance and upgrades take place on a daily basis in order to keep the rail lines operable and efficient. If a railroad had to obtain Federal Consistency Review every time it wanted to engage in this crucial rail work because of a federal action, its operations would come to a screeching halt. This review process could not possibly keep pace with a railroad's needs to keep its operations in good working order. Railroads cannot anticipate all the maintenance or improvement projects it would need to conduct, as the condition of a rail line and the elements are everchanging like here where heavy rains washed out the rail bed. Therefore, because of the undue burden these CZMA review cases would

inevitably place on interstate commerce, a railroad would not be able to operate safely or at all in contravention of the ICCTA's purpose.

Additionally, if the Commission could require railroads to move their active rail lines as sought by Del Mar and supported in public comments by the Commission, the burden of this type of regulation on rail operations would be monumental. The movement of rail lines in densely populated areas like the County of San Diego would be financially and logistically impossible for most railroads. Therefore, if the Commission required NCTD to move its rail line as a condition of its federal review, this action could stop all service on the Line while NCTD attempted to comply with such an order. It also could financially burden NCTD and BNSF to the point that future rail operations may not be sustainable for intercity and commuter passenger service or competitive for freight movement, considering that planning studies estimate that the cost of constructing various tunnel alternatives ranges between $2.5 and $3.5 billion (in 2017 dollars) to complete. Moreover, these costs exclude ongoing operations and maintenance costs of a tunnel. As stated previously, NCTD's annual capital budget for FY 21 is $39.5 million to fund the totality of all if its operations including bus and rail and has unfunded state of good repair needs that exceed $1 billion.

As a result, Federal Consistency Review of rail maintenance and upgrade projects would so burden NCTD that rail operations would be nearly impossible. Also, allowing states to create a variety of complex regulations which could govern how and where a railroad in interstate commerce is operated would directly conflict with the goal of uniform national regulation of rail transportation. For these reasons, Federal Consistency Review here cannot be "harmonized" with the ICCTA.

## CONCLUSION

For the foregoing reasons, the Board should issue the requested declaratory order.

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Counsel for NCTD

## VERIFICATION

I, Matthew O. Tucker, Executive Director of the North County Transit District, do hereby verify under the penalty of perjury that, to the best of my knowledge, the foregoing Petition for Declaratory Order is true and correct. Further, I certify that I am qualified and authorized to make such verification on behalf of the North County Transit District in connection with this proceeding before the Surface Transportation Board.

Executed this 26 day of August, 2020

Matthew O. Tucker
Executive Director
North County Transit District

## CERTIFICATE OF SERVICE

In accordance with 49 C.F.R. § 1104.12, I hereby certify that on August 28, 2020, I served a copy of this Petition for Declaratory Order on counsel known to represent the City of Del Mar and the California Coastal Commission by first-class mail and email as follows:

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September 24, 2021

California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105-2219
Comments submitted via: StatewidePlanning@coastal.ca.gov

RE: Comments on Critical Infrastructure at Risk – Sea Level Rise Planning Guidance for California's Coastal Zone, Public Review Draft August 2021

To Whom It May Concern:

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to comment on the Coastal Commission's Public Review Draft of *Critical Infrastructure at Risk – Sea Level Rise Planning Guidance for California's Coastal Zone* (Draft Guidance).

The California Association of Sanitation Agencies (CASA) represents more than 125 local public agencies engaged in the collection, treatment and recycling of wastewater and biosolids to protect public health and the environment. Our mission is to provide trusted information and advocacy on behalf of California clean water agencies, and to be a leader in sustainability and utilization of renewable resources. CASA is the leading California association dedicated to advancing wastewater interests, including the recycling of wastewater into usable water, generation of renewable energy, biosolids and other valuable resources. Through our efforts, we help create a clean and sustainable environment for California. Throughout California, CASA members own and operate publicly owned wastewater treatment works (POTWs) that include collection systems, treatment facilities and appurtenant structures.

Our specific comments are provided below for your consideration in alignment with the Coastal Commission's "proactive and protective" approach, as well as taking into account the key considerations for adaptation planning as laid out in the Draft Guidance.

***Using Extreme Sea Level Rise Scenarios to Guide Trigger-Based Adaptive Management Looking Beyond 2050***

The Coastal Commission recommends the use of the medium-high and extreme risk (or H++) scenarios, representing up to a 10-foot rise in sea level with unknown probability, for evaluating the potential impacts to critical coastal infrastructure with life spans extending beyond 2050 (including water, wastewater, and stormwater infrastructure). While this is consistent with past recommendations by the Ocean Protection Council (OPC) and the Coastal Commission, as well as the latest permit evaluation process, it is much more extreme than the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathway 8.5 (RCP 8.5) projection in its Fifth Assessment Report showing 3.7 feet of sea level rise by year 2070. The RCP 8.5 scenario has been referenced in recent local climate change vulnerability assessments as the highly conservative scenario where there are no global efforts to limit or reduce emissions implemented. CASA agrees that critical infrastructure is of utmost importance to protect and the recommendation "to *understand and plan* for the H++ scenario, not necessarily *site and design* for the H++ scenario." However, it is important to consider regional variation of sea level rise impacts and our need to responsibly invest rate-payer funds. Our members need to balance this with a proactive adaptive management approach considering "phased, trigger-based solutions and adaptation pathways" as stated in the Draft Guidance allowing "asset managers to undertake adaptation incrementally, which can allow time for long-term planning and identification of funding sources."

The Draft Guidance also highlights physical constraints of concern. Specifically (on page 116), it states that:

> *"Wastewater and stormwater drainage systems have historically relied on gravity to move water in the system, and these systems often discharge into waterways such as the ocean. While gravity flow may be a common design method for conveyance of wastewater and stormwater systems, such systems can use alternative components such as pressurized pipes for constrained locations, and pumping otherwise, including where necessary to avoid hazardous coastal areas. In addition, future technology innovations and actions to reduce wastewater effluent could reduce location constraints on wastewater systems (Ewing, 2014)."*

While making a "switch" from a gravity to a pressurized system may be an option, it is critical planners understand that this represents a complete change in system infrastructure and operation (i.e., requiring replacement of pipeline material, joints, and overall operations and maintenance procedures). Replacing systems in small communities is a challenge but more feasible than replacing systems serving medium to large metropolitan areas with more complicated configurations.

Regarding siting and design of new water infrastructure or the relocation of existing infrastructure (as referenced in Appendix B, items 33, 41 and 42, on pages 152 and 155-156), the Draft Guidance suggests it "shall be sited outside of hazardous areas, including areas vulnerable to sea level rise, unless it is infeasible to do so." CASA agrees with this statement (and underscores the importance of the underlined portion of the sentence), and we ask that the Draft Guidance recognize that historical practices have included equipment and infrastructure that are capable of being temporarily flooded for properly serving the community.

Regarding ocean outfalls (as referenced in Appendix B, item 43, page 156), actions to reduce wastewater effluent may not be necessary or feasible from a financial, operational, and/or end use perspective. As sea level rises and storm surges increase, deep ocean outfalls may have sufficient pressure differential to continue successful operation while other outfalls (closer to sea level in elevation) may need to be modified to increase the pressure differential (by lifting a pump station, for example) or require an increase in pumping capacity to discharge.

**CASA strongly recommends assessing critical coastal wastewater collection, pump/lift station, treatment, and outfall infrastructure on a case-by-case basis with the best available science at a regional level to determine the phased adaptation (or trigger-based) approach to solutions that are a best fit for each POTW or regional solution.**

***Adaptation Costs vs No Action – Paying Less Now Versus a Lot More Later?***

The Draft Guidance suggests (on page 59) that proactive planning for sea level rise is much more cost-effective in the long run relative to no action (i.e., replacing damaged assets/facilities following each event). However, the references cited either do not allow for extrapolation of the data or may overly inflate the cost-effectiveness since the range is based on regions where conditions (historical and projected) are not representative of those experienced along the California (or western U.S.) coasts. For example, some of the studies cited include hurricanes with extremely intense winds and storm surge (compounded by severe wave action caused by the winds) that do not take place along the California coastline. In reviewing the references, we found and noted the following:

- The Draft Guidance references the third national climate assessment, specifically chapter 25 (written by Moser et al. 2014), that cites two studies from 2005 and 2010, indicating benefit-cost ratios (BCRs) for implementation of adaptation measures for sea level rise for protecting water infrastructure on the order of 4 to 10, respectively. CASA recommends citing the original sources for ease of reference.

- The Draft Guidance also references a 2018 Moser-led paper, which states "The basis for cost estimates included in local government plans is highly uneven in terms of what is and is not included, the level of specificity of adaptation strategies, economic assessment methods used, and any underlying assumptions for determining cost estimates (discount rates, design life vs. life of structures, assumptions about changing costs of adaptation measures over time etc.)." Additionally, it states "the uncertainties …and the limited number of economic assessments of adaptation costs available do not allow for a credible extrapolation from these estimates to the statewide cost of adaptation to local governments." Finally, it also states that "…currently available data constitutes a rather weak and inconsistent basis on which to put forward a credible estimate of statewide adaptation costs at this time." Estimating overall cost-effectiveness of sea level rise mitigation based on the values presented in the Moser et al. 2018 paper is not appropriate.
- The *Natural Hazard Mitigation Saves: 2019 Report* (cited as both Multi-Hazard Mitigation Council, 2019 and National Institute of Building Sciences, 2019 – the former is the suggested citation) states it "…found that society saves up to $13 for every dollar invested in hazard mitigation, such as reducing flood, hurricane, wind, earthquake, and wildfire risk." First, looking at the source, this value represents the benefit portion of the BCR (not the BCR itself, which is 11) and it is taken from Table 2-18 where less than 5 percent of that benefit value is attributed to riverine flooding mitigation. The remainder of the benefit value is based on earthquake and hurricane mitigation benefits, which are not representative of sea level rise mitigation. Additionally, there is one case study referenced in the appendix that shows a BCR of $31 for flooding mitigation in North Carolina, which would not be "representative of most transportation and water infrastructure mitigation projects" as stated. Estimating overall cost-effectiveness of sea level rise mitigation based on these values is not appropriate and needs to be evaluated on a case-by-case basis.

**CASA recognizes the criticality and value of sea level rise mitigation for water infrastructure and recommends the Coastal Commission continue to work with individual POTWs on a case-by-case basis and CASA** to understand what natural hazards (in addition to sea level rise) are relevant and if the impacts of those natural hazards are projected to be enhanced by climate change as well. This approach provides an opportunity to identify proactive adaptive measures that could be protective against sea level rise as well as threats posed by other natural hazards and work collaboratively with other utilities on regional solutions. This information can then be used to assess a more accurate BCR and specific triggers that warrant collaboration and implementation.

***Environmental Justice Communities and Wastewater Infrastructure Projects***

Water infrastructure provides essential public services to all customers and improves the livability of those communities served. If there is a mitigation project that is needed to reduce the vulnerability of infrastructure, the typical planning process involves identification and engagement of the public (including environmental justice communities) throughout the project, providing multiple opportunities and platforms through which to inform the process and project details. While this process involves the community to inform the design and implementation considerations, it does not include informing permitting decisions as stated in the Draft Guidance, which are under the authority of the appropriate regulatory authority (such as the Coastal Commission or State and Regional Water Boards). CASA recommends modifying the language to reference those state agencies that have ultimate authority over permitting decisions.

***Consideration of Increased Recycled Water Use as Part of Newly Constructed or Modified POTWs and/or Outfalls***

The following language (on page 157, item 44) raises concerns:

"A Recycled Water Management Plan shall be required when a wastewater treatment plant is constructed or redeveloped and prior to approval of increased use of an existing vulnerable outfall or development of a new outfall. The objective of the Plan shall be to ensure that the maximum amount of treated effluent is used for beneficial reuse purposes, with the ultimate goal of achieving 100% reuse. The Plan shall identify actions the operator will take within a five- and ten-year period to implement beneficial reuse, as well as specific milestones and projected timelines to implement the proposed actions. … The asset operator shall submit updated Plans that describe progress made towards the goal of 100% reuse of treated effluent in subsequent five-year periods, and update actions and timelines for the upcoming five- and ten-year horizons."

CASA and its members (wastewater treatment plants) do not set "goals" for its production/use in isolation – planning for use of recycled water is typically done in partnership with the sister water agency and those entities that have a demand for recycled water. Regarding the "ultimate goal of achieving 100% reuse" – it is not possible to achieve 100% reuse, as there will be residuals (including brine) and portions of peak flows during heavy rain events that the advanced treatment (or recycling) facilities cannot accommodate, and typically demand for recycled water use drops dramatically during wet weather. All of these factors mean that some level of discharge will be necessary, and there may be increased variability in the flow.

CASA strongly recommends modifying the language to address this and suggests the following:

> "A Recycled Water Management Plan shall be ~~required~~ developed when a wastewater treatment plant is constructed or ~~redeveloped~~ modified and prior to approval of increased use of an existing vulnerable outfall or development of a new outfall. The objective of the Plan shall be to ~~ensure that~~determine what the maximum amount of treated effluent ~~is~~ that can feasibly be used for beneficial reuse purposes~~, with the ultimate goal of achieving 100% reuse~~. The Plan shall identify actions the operator will take within a five- and ten-year period to implement beneficial reuse, as well as specific milestones and projected timelines to implement the proposed actions. … The asset operator shall submit updated Plans that describe progress made towards the goal of ~~100%~~ feasible maximum reuse of treated effluent in subsequent five-year periods, and update actions and timelines for the upcoming five- and ten-year horizons."

We appreciate the opportunity to comment on the Draft Guidance and look forward to working together as proactive partners. Please contact me at sdeslauriers@carollo.com (or 925-705-6404) if you have any questions.

Sincerely,

Sarah A. Deslauriers, P.E., ENV SP
Climate Change Program Manager

CALIFORNIA ASSOCIATION OF REALTORS®

August 24, 2021

Steve Padilla, Chair
California Coastal Commission
455 Market Street, Suite 300
San Francisco, California 94105

**SUBMITTED VIA EMAIL**

**RE: Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone – August 2021**

Dear Chair Padilla,

Thank you for the opportunity to provide comments on the Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone. 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 community development. We respectfully offer the following comments for you to consider regarding the proposed language in the Critical Infrastructure Guidelines.

Several sections of this document refer to Section 30235 of the Coastal Act as specifically and exclusively "grandfathering" protection for development that predates the Coastal Act. 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 not supported by the law itself, 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 infrastructure managers and property owners and remain consistent with several Coastal Commission decisions that approved the construction of shoreline protection for structures built after January 1, 1977.

Furthermore, to underscore this point, the legislature rejected AB 1129 (Stone, 2017), a bill that would have enacted the limited definition of "existing structure" proposed in this document, demonstrating that even the legislature disagrees with the pre-1977 definition.

Additionally*, Appendix B: Model Policies*, introduces local ordinance language concepts calling for infrastructure projects to be planned and prioritized based upon reductions in Vehicle Miles Traveled (VMTs). VMT reductions are already required in general plans, so the additional requirement of Local Coastal Programs needing to address VMTs as part of infrastructure adaptation to sea level rise is duplicative of existing government planning requirements and potentially harmful to existing remote coastal communities.

Our final comment is that we endorse the use of phased adaptation in the context of infrastructure and community management and land use and planning in a changing environment. It is important that actual climate triggers and other measurable benchmarks should serve as the mechanisms for implementing incremental sea level rise policy changes.

We hope that you find our comments relevant and helpful. If you would like to discuss our points further, please do not hesitate to contact me at jelig@car.org.

Thank you,

Jeli Gavric
Legislative Advocate

cc: Members, California Coastal Commission



915 L Street, Suite 1460, Sacramento, CA 95814 Tel 916.492.5200 Fax 916.444.1794 www.car.org

The Honorable Steven Padilla, Chair
Members of the California Coastal Commission
California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

RE: Critical Infrastructure at Risk Sea Level Rise Planning Guidance for California's Coastal Zone Public Review Draft August 2021

Honorable Chair Padilla,

We appreciate the opportunity to provide comments on the Public Review Draft of the Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone. Smart Coast California (SCCa) is a nonprofit organization with more than 90,000 stakeholders dedicated to advocating for the collaborative stewardship of the coast, community sustainability, property rights and the environment. Our comments include those policies SCCa supports and why, followed by a discussion of the policies which we oppose.

**SCCa supports** using triggers as an adaption strategy for existing development including both critical infrastructure and residential and commercial communities. We support the extensive use of trigger-based adaptation planning strategies in this document. Phasing allows adaptation measures to be triggered when they are *necessary* as opposed to precluding protection strategies by mandating managed retreat. Triggers (in the form of trigger-based adaptations) are referenced throughout the document. Some examples include (emphasis added):

- Page xii "Consider phased, trigger-based solutions and adaptation pathways."
- Page 56 "Phased adaptation – also known as an adaptation pathway approach or trigger-based adaptation – is the use of different adaptation strategies over time as certain sea level rise thresholds are met. For example, adaptation phases can start with protection strategies, such as sand replenishment, or accommodation strategies, such as floodproofing and elevation, and lead to eventual relocation in the longer term as protection and accommodation strategies become infeasible due to increasing hazards, costs, and coastal resource impacts."
- Chapter 4, Page 80 - Transportation corridors such as a highway segment that may be vulnerable in the near-term may be ripe for trigger-based adaptation as this strategy allows the issue to be addressed with urgency
- Draft Guidance Chapter 6 Page 117 - Stormwater management may require new sites to be considered due to the constraints on suitability or infiltration capacity of stormwater components. Triggers, in tandem with new design standards, can be implemented into LCPs to proactively and retroactively resolve stormwater management problems.
- Draft Guidance Appendix B Page 142 & 145 - Phased and trigger-based adaptation measures should be implemented into LCPs so as to not to hinder the utility of transportation infrastructure development. Phased measures may include hard shoreline protective devices for limited periods of time, elevation and/or relocation.
- Draft Guidance Appendix B Page 150, 156 & 158 – Repetitive

- Draft Guidance Appendix E. Case Studies Page 186-187, & 192 – The maintenance of a vegetated dune habitat and the San Elijo Lagoon are used as case studies. Monitoring programs are utilized to trigger necessary maintenance and prevent the projects from losing functionality.

**SCCa would like to emphasize that we support trigger-based phased adaptation which should be applicable not only to infrastructure, but to the entire coastline of California.** We have an adopted policy addressing trigger-based adaptation, which we refer to as Tiered Response, which states: "Tiered Response is a planning principle that institutes certain defined policies if, and only if, there are specific thresholds of sea level rise that are observed, measured and documented, as opposed to relying only upon projections. There are multiple options that can be incorporated into a tiered response policy including, but not limited to, beach nourishment, kelp forests, offshore reefs, groins, submerged breakwaters and community seawalls. These options should be adopted as preferred alternatives to managed retreat in areas that cannot accommodate relocation of developments and those that prohibit property owners from defending their homes, businesses and related infrastructure."

**SCCa supports** the inclusion of Model Policy 27. Hard Shoreline Protective Devices and Long-Term Planning. Page 146, Appendix B Model Policies.

**SCCa Opposes** the definition of **"Existing Development"** found in Appendix A Relevant Coastal Act Policies, Page 128, emphasis added.

> "As described in the Coastal Commission's Sea Level Rise Policy Guidance (2018), the Commission interprets the term "existing", as used in this policy, as meaning structures that were in existence on January 1, 1977 – the effective date of the Coastal Act."

We understand that the Coastal Commission adopted a Sea Level Rise Policy Guidance Document in 2018 that asserts broad legislative intent with regards to the definition of "existing development" found on page 165. SCCa opposes the use said definition of "existing development" in the Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone Public Review Draft, August 2021. We understand that the Coastal Commission staff interprets "existing development" as such, yet the Coastal Commission itself has publicly stated otherwise.

In the appellate brief for the unpublished appellate case of *Surfrider Foundation v. California Coastal Commission* (June 5, 2006, No. A110033), the Coastal Commission convincingly articulated why "existing" is meant to be interpreted as currently existing, clearly discrediting the Commission staff's definition. From the Appellate Brief filed by the California Coastal Commission:

- "It would make little sense to evaluate permit applications under conditions as they existed thirty or more years ago and ignore the considerable changes that have taken place along California's coast since the Coastal Act's passage." (Commission's Brief in *Surfrider, supra, P. 18*)
- In 2006 at a public hearing, the Commission's chief counsel stated that "the Commission has consistently interpreted Section 30235 to refer to structures that exist at the time of the application." (Commission's Brief in *Surfrider, supra, P. 20*)
- "Had the Legislature not included the word "existing" in section 30235, applicants could apply to build seawalls to protect a future proposed structure, rather than be forced to site the proposed structure so that it would not necessitate a seawall. (Commission's Brief in *Surfrider, supra, pp. 23)*

Furthermore, the Commission staff's interpretation of "existing" and the impact on shoreline protection rights for structures built on or after the January 1, 1977 date is at odds with:

- *Constitution of the State of California*
  *Article I - Declaration of Rights - Section 1*
  *(a) 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.*
- *The "Takings Clause" of the Fifth Amendment of the U.S. Constitution states that government cannot take private property without just compensation:*
  *No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.*
- *Takings reference in the Coastal Act, Section 30010*
  *The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the commission, port governing body, or local government acting pursuant to this division to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation therefor. This section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.*

**SCCa supports** the careful consideration of elevating causeways.
Chapter 5, Transportation Infrastructure Page 92 "As with protection strategies, some accommodation strategies could result in negative impacts to coastal resources (e.g., elevated structures may block coastal views or detract from community character), and so careful analysis should support any planning and permitting decision.

**SCCa support**s the use of Shoreline Protection Devices.
Chapter 5, Transportation Infrastructure Page 93. "Shoreline Protective Devices Protective devices for transportation may be a reasonable short- to mid-term adaptation strategy when they are the least environmentally damaging alternative in the context of phased adaptation, and when designed to safeguard coastal access, mitigate for all impacts to coastal resources, protect public trust resources, and ensure equitable access to, and benefits from, coastal resources over time."

> **SCCa Policy addressing Managed Retreat:** "The practice of managed retreat should not be applied to areas that cannot accommodate relocation of developments and those that prohibit property owners from defending their homes, businesses and related infrastructure."
>
> Managed retreat is referenced in this document in Appendix E. Case Studies.
>
> Page 190. Surfer's Point, Ventura. The first reference is to Surfer's Point Project which is a good example of how managed retreat can work, in other words, where there was enough adjacent property (also owned by the City of Ventura) to retreat towards.

**SCCa would like to note that managed retreat is not a reasonable approach in developed areas of coastline with established neighborhoods.**

Page 220 Local Studies: Pacifica. This excerpt from the Pacifica Sea Level Rise Adaptation Plan addresses the practical difficulties with implementing managed retreat in well-established areas: "While the cost-benefit results indicate that managed retreat/realignment may be a long-term cost effective option in many sub-areas, the immediate costs and impacts to the City's adopted goals would be severe compared to the benefits speculated in the long-term, which makes this option difficult to support and implement in the near-term...and that managed retreat is less aligned with the Council adopted goal to Preserve Existing Neighborhoods and Promote Environmental Justice and Local Economic Vitality."

**Hard Shoreline Protection**

**SCCa supports** the inclusion of Model Policy 27. Page 146, Appendix B Model Policies. Hard Shoreline Protective Devices and Long-Term Planning. However, **SCCa opposes** inclusion of an expiration date for the permit granted for said infrastructure. It is not practical nor advisable to use public funds to protect critical infrastructure and limit its use in the future based on arbitrary expiration dates.

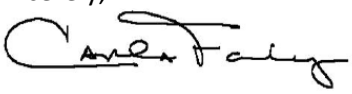
Page 146: "(a) special conditions state that the permit will expire in [insert appropriate timeframe considering long-term planning needs],"

**H++**

SCCa would also like comment on the use of H++ Sea Level Rise scenarios in the "Critical Infrastructure At-Risk, Sea-Level Rise Planning Guidance for California's Coastal Zone, Public Review Draft August 2021." **H++ Scenario (Sweet, et al. 2017) has no associated probability.** Probabilistic projections based on Kopp et al. 2014 include the Low Risk Aversion with a 17% probability that Sea Level Rise will exceed (1.1 feet) in 2050 and 3.4 feet in 2100 and Medium High Risk with a 1-in-200 chance (.05% probability) that Sea Level Rise will exceed (1.9 feet) in 2050 and 6.9 feet in 2100 (Source: Table 3. Sea Level Rise Projections for the San Francisco Tide Gauge (OPC 2018)).

We acknowledge that planning for Sea Level Rise is a daunting task and would like to thank you for the opportunity to comment on this document.

Sincerely,



Carla Farley
President
Smart Coast California

**Brian D'Agostino**
Director, Fire Science & Climate Adaptation

8326 Century Park Ct, CP61N
San Diego, CA, 92123

tel: 619.725.5195
cell: 617.519.9926
email: bdagostino@sdge.com

September 24, 2021

To: California Coastal Commission
Re: Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone

San Diego Gas and Electric Company (SDG&E) welcomes the opportunity to comment on the Public Review Draft of the Critical Infrastructure At-Risk Sea-Level Rise Planning Guidance for California's Coastal Zone.

SDG&E is a recognized leader in building resilient energy infrastructure in the face of climate change. For over 10 years we have invested billions of dollars to enhance our systems and operations to respond to the threat of wildfires and other climate hazards. We have a group of professionals in our Fire Science and Climate Adaptation (FSCA) team dedicated to this task. SDG&E has undertaken research to understand sea-level rise vulnerabilities through California's Fourth Climate Change Assessment. We continue our analysis in preparation for the requirements of the CPUC's Order Instituting Rulemaking on Climate Adaptation. We work closely with our regional partners through the San Diego Regional Climate Collaborative to build regional climate resilience. Further, SDG&E partners with Scripps Institution of Oceanography on a research program to investigate the science of sea-level rise in San Diego County.

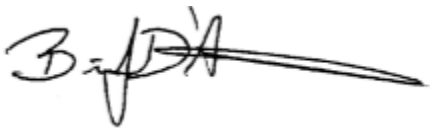
Our comments are provided in a spirit of cooperation as the Coastal Commission seeks to address the challenges posed by climate change and sea-level rise in California, recognizing that critical energy systems are not the focus of the document. Nevertheless, we welcome the recognition of the interconnectedness of critical infrastructure, and the vital role of energy systems in the delivery of service by critical water and transportation infrastructure.

SDG&E recognizes the philosophy of taking a science- and evidence-based approach, through prudent risk management strategies via phased adaptation pathways. We recognize the Commission's dual objectives of seeking to enhance short-term resilience of critical infrastructure to coastal climate change hazards while also seeking to reduce long-term climate impact risk.

SDG&E does not make specific comment on the climate change scenarios or timeframes adopted in the Draft Guidance.

Finally, SDG&E commends the Coastal Commission for the inclusion of technical Appendices. These provide useful technical reference materials for the providers of critical infrastructure.

With best regards,



Brian D'Agostino
Director – Fire Science & Climate Adaptation
San Diego Gas & Electric

September 24, 2021

via electronic mail: StatewidePlanning@coastal.ca.gov

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

**RE: Draft Sea Level Rise Planning Guidance Comments**

Dear California Coastal Commission Staff:

Thank you for the opportunity to provide brief feedback under public comment regarding your draft *"Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone"* document on behalf of CalDesal.

CalDesal is a non-profit association that educates and works toward the increased use of inland brackish and coastal ocean water desalination along with salinity management as part of a diverse, secure, and climate-change resilient supply to help meet California's water needs.

**Comments**
We appreciate the work that went into crafting this comprehensive draft risk assessment guidance. However, we are concerned with the section in the 2021 draft guidance document states that "*critical infrastructure*" design should be based on the H++ scenario. The H++ scenario was projected from the work of a single climate modeling group (Sweet et al., 2017) that has never been duplicated; and is an outlier among 32 climate models reviewed by the Intergovernmental Panel on Climate Change (cf. IPCC, 2018).
In fact, the H++ scenario is such an outlier that a disclaimer appears above the sea level rise projection tables in Appendix B of the California Coastal Commission (2018) guidance document that states,

***"The H++ projection is a single scenario and does not have an associated likelihood of occurrence as do the probabilistic projections".***

The decisive question is whether desal project design should be based on criteria whose efficacy is in doubt, whose likelihood of occurrence cannot be quantified, and which the Intergovernmental Panel on Climate Change has rejected. We do not believe it should be based on H++.

We appreciate the ability to express our comments and thank you for the opportunity.

Sincerely,

Wendy Ridderbusch
Executive Director CalDesal
wendyr@caldesal.org

Cc: Secretary Wade Crowfoot, Chairman Ocean Protection Council
Tom Luster, California Coastal Commission

POSEIDON SURFSIDE
a Poseidon Water company

September 23, 2021

**VIA Electronic Mail:** StatewidePlanning@coastal.ca.gov

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

***RE: Comments on Draft Sea Level Rise Planning Guidance***

Dear Commission staff:

Poseidon Water appreciates the opportunity to comment on the California Coastal Commission staff's August 2021 public review draft document entitled *Critical Infrastructure at Risk, Sea Level Rise Planning Guidance for California's Coastal Zone.*

We have worked very closely with the Commission staff over the past fifteen years on the evaluation of a Coastal Development Permit for the proposed Huntington Beach Desalination Project. Our consultation with Commission staff has specifically focused on sea level rise-related flooding and inundation risk[1] and included extensive discussions about Coastal Act regulations, applicable Local Coastal Program coastal hazard policies and the latest Commission guidance. As such, we have completed and shared with Commission staff exhaustive site and project-specific sea level rise investigation, modeling and analyses using the current best available climate science as identified by the Commission[2]. It has been an iterative process over the years closely incorporating evolving best available climate science and evolving Coastal Commission guidance including the recommendations found in the most recent August 2021 draft sea level rise guidance document. We hope this joint experience, as reflected by our comments herein, is informative to the Commission and its stakeholders as staff prepares updated sea level rise guidance for coastal development projects deemed by the state to be critical infrastructure.

**Comments**

The draft guidance states in several places that it is "*advisory only and not regulation or legal standard of review"*[3]. Appendix A of the draft guidance identifies several Coastal Act policies that Commission staff state are relevant to the evaluation of critical infrastructure projects. The fundamental Coastal Act and LCP hazard policies that address hazard risk seek to "minimize risks to life and property"[4]. Hazard exposure and hazard risk are different concepts. For example, a

[1] Flooding is defined as the increased extent of a temporarily wet condition; inundation is defined as the increased extent of a permanently wet condition. See California Coastal Commission (June 4, 2019).
[2] See Moffat & Nichol's 2020 report entitled *Huntington Beach Desalination Project Sea Level Rise Hazard Analysis and Adaptation Plan* and the 2020 Moffat & Nichol report entitled *Huntington Beach Desalination Project Tsunami Flood Assessment*.
[3] See "How To use This Document".
[4] See Coastal Act (Pub. Res. Code Section 30253).

site exposed to an extreme worst-case sea level rise-related hazards does not mean development on the site will result in irreputable property damage and/or loss of life if the consequence of that hazard exposure is low.

| Probability of Hazard Exposure | X | Consequence of Hazard Exposure | = | Hazard Risk |
|---|---|---|---|---|

To help stakeholders distinguish between the recommended guidance (including evaluating sea level rise scenarios that have no assigned probability of occurrence) and the standard of review under Coastal Act section 30253, please consider including relevant building code citations meant to support the legal standard of review (i.e., prevent irreputable damage to property or loss of life).

The draft guidance document states throughout that it is intended for water infrastructure but does not apply to seawater desalination facilities[5], the development and operation of which constitutes a coastal dependent use. Poseidon Water concurs that seawater desalination facilities that supplement other drinking water supplies are not "critical facilities" for the purpose of flood hazard analysis and design, however, please consider a more fulsome explanation so stakeholders are properly informed as to why seawater desalination facilities are excluded from the draft guidance.

The draft guidance recommends evaluating the extreme risk aversion (H++) scenario for projects and planning efforts related to critical infrastructure. However, the guidance states that the *"recommendation is to understand and plan for the H++ scenario, not necessarily to site and design for the H++ scenario*"[6] [emphasis added]. This is a critical point of clarification for Commission stakeholders that should be emphasized throughout the final guidance document.

Sea level rise is a gradual process, occurring over decades. The H++ scenario is a second half of the century scenario with no assigned probability of occurrence. State of California Sea-Level Rise Guidance (OPC 2018) states: *"…the scientific community has made significant progress in producing probabilistic projections of future sea level rise, and the team of scientists advising the OPC Protection Council (OPC) on this Guidance strongly recommended that decision-makers use probabilistic projections to understand and address potential sea-level rise impacts and consequences."* [emphasis added] (OPC 2018, p. 4). As Commission staff's draft guidance notes, it is inappropriate and likely infeasible to site or design a project today such that it will avoid the impacts associated with an environmental hazard risk that has no assigned probability of occurring in 2100 – 80 years from now.

Moreover, the latest update on global sea level rise science and future projections was provided by the Intergovernmental Panel on Climate Change (IPCC) in a 2019 special report titled *The Ocean and Cryosphere in a Changing Climate*. This report provides an updated probabilistic assessment of global sea level rise and specifically excludes the H++ scenario from these projections describing the assumptions made by DeConto and Pollard (2016) related to marine ice cliff

[5] See pages vi, 18
[6] See page 22

instability as unproven and characterized by deep uncertainty. The deep uncertainty associated with dynamical ice loss from Antarctica is due to lack of knowledge about these processes and disagreement among experts as to the appropriate models and probability distributions for representing such uncertainty (IPCC, 2019). Additional research from a group of scientists at Massachusetts Institute of Technology and Boston College concluded the assumptions regarding ice cliff instability were likely overestimated (MIT News, 2019). The latest science indicates the extreme sea level rise scenario, referred to as H++ in the OPC guidance, is not widely supported by the scientific community.

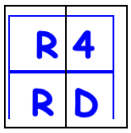
NASA and others are working on an update to the Sweet et al (2017) paper which was originally cited as the underpinning research to support the inclusion of the H++ scenario in the OPC 2018 SLR Guidance. NASA scientists have reported that the H++ scenario is no longer applicable and it is expected to be removed from the updated research report expected in late 2021. Consequently, we suggest that the final guidance indicate that the next OPC Update is unlikely to include the H++ scenario and clarify that evaluating such extreme sea level rise scenarios that have no assigned probability of occurrence may be enlightening but is not scientifically appropriate or justifiable as the basis for project design.

Thank you again – we greatly appreciate this opportunity to comment.

Sincerely,

Scott Maloni
Vice President, Poseidon Water

cc: Tom Luster, Coastal Commission
Secretary Wade Crowfoot, Chairman Ocean Protection Council




September 24, 2021

California Coastal Commission
Via StatewidePlanning@coastal.ca.gov
Attn: Shayna Gray, Statewide Planning Supervisor

**Re: Critical Infrastructure at Risk, Sea Level Rise Planning Guidance for California's Coastal Zone**

Dear Coastal Commission Staff,

The undersigned organizations are committed to coastal resource protection and responsible planning for climate change. We commend Coastal Commission staff's work on the *Critical Infrastructure at Risk, Sea Level Rise Planning Guidance for California's Coastal Zone* (Guidance) for meeting an urgent need to prepare the state's critical coastal infrastructure for a future of rising seas and other related hazards (e.g., groundwater rise, groundwater intrusion, storm surge, and flooding).

Coastal infrastructure supports a thriving coastal economy and facilitates access to California for millions of visitors every year. With 3.5 feet of sea level rise expected in

the next thirty years,[1] billions of dollars of existing and future infrastructure initiatives could experience catastrophic failure. California's coastal infrastructure is already experiencing the impacts of rising seas, with recent roadway collapses from storm and tidal surge plaguing our coastal communities still currently affecting many coastal communities. The Guidance responds to such vulnerabilities with affordable and long-lasting approaches that will enhance the overall resilience of our coastline.

The current draft does a great job of highlighting the need for cities and counties to:

1. Make water and transportation systems more resilient
2. Address the disproportionate burden that sea level rise inflicts on environmental justice communities
3. Prioritize nature-based projects that address multiple climate-related stressors while providing co-benefits
4. Evaluate and prepare for the most disastrous H++ sea level rise scenarios
5. Include the mean high tide line as an ambulatory point of reference and acknowledge that public tidelands are migrating inland.

## Ways the Guidance Could Improve

We recommend the following suggestions to improve the effectiveness of the Guidance:

1. **Express more caution around phased adaptation approaches that include hard armoring**. Seawalls, riprap, and groins have significant negative impacts; and once these structures are in place they are very rarely removed[2]. Jurisdictions should be avoiding any additional armoring of their beaches, including armoring that is permitted through processes designated as emergencies. This Guidance should discourage or prohibit the use of such structures as interim adaptation solutions because they typically result in more public harm than good. In many cases, shoreline armoring in the near-term may even preclude or delay much needed future nature based solutions. If permitted, armoring must be conditioned heavily on unambiguous commitments to facilitate long-term adaptive management, including through strict removal and restoration requirements.

2. **Clearly state that a narrow window of opportunity exists for local governments to act proactively.** Sea level rise will drastically accelerate in the

[1] https://www.opc.ca.gov/webmaster/_media_library/2021/01/State-SLR-Principles-Doc_Oct2020.pdf
[2] *See* Michelle Hummel et al., Economic Evaluation of Sea-level Rise Adaptation Strongly Influenced by Hydrodynamic Feedbacks, 118 Proceedings of the National Academy of Sciences 1 (July 12, 2021), available at: https://doi.org/10.1073/pnas.2025961118.

next three decades — adaptation solutions that seem difficult now may become impossible when coastal access and beaches are already gone.

3. **Encourage local governments to evaluate the co-benefits of natural infrastructure to the environment**. Nature-based projects can save money for stormwater, street sweeping, transportation and public utilities departments; they can also provide public open space as well as valuable habitat, recreation, and health benefits. Cities should be evaluating these projects for their co-benefits so that they may be justified in prioritizing them. Permitting and planning decisions should require long term cost benefit analyses that consider wide ranging co-benefits.

4. **Emphasize the need to avoid the siting and design of new critical infrastructure or the redevelopment of existing infrastructure in hazard zones**. Due to questions around the Coastal Act definition of *existing development*, as well as differing interpretations of FEMA flood maps and Local Coastal Programs (LCPs), the Guidance should make clear that it is unacceptable to site new critical infrastructure or redevelop aging infrastructure in harm's way, where it will predictably require ongoing remediation and protection and be at risk of loss during the life of the project.

   The Guidance correctly includes a recommendation to understand and plan for the H++ scenario. However, the Commission should also make clear that any new structures expected to last beyond 2050 should be sited and designed for this scenario, and that the Commission will otherwise prioritize adaptation options which facilitate pathways for responding to this scenario. We specifically do not agree with the Guidance at p. 24, which appears to dismiss the current need to consider smart siting and design for new critical infrastructure.

   High-end sea level rise scenarios will require many years of following effective adaptation pathways. Sea level rise is the compound result of multiple climate trends, and sea level impacts may be felt more slowly than other well-known climate impacts (ie heat). However, sea level rise is not necessarily a gradual process. There is broad consensus in the scientific community, outlined in both the IPCC Ocean and Cryosphere report (2019) and California's Fourth Climate Change Assessment (2018), that sea level rise will drastically accelerate at some point around mid-century[3] (2019 IPCC Technical Summary Ocean and Cryosphere. TS-7).

[3] https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/SROCC_FD_TS_Final.pdf

**5. Encourage local governments to thoroughly evaluate and mitigate potential environmental justice implications associated with decisions around new and redeveloped critical infrastructure**. Poseidon Water's proposed Huntington Beach Desalination Plant project offers an example of why a thorough evaluation is important. The plant is located in low-lying tidelands and in order for the site to be accessible as sea levels rise, the public will take on an enormous and currently unexamined cost of maintaining flood control channels to protect the site as well as nearby roadways, electricity and water to service and access the site. Additionally, the site may be subject to legacy contamination associated with the exposure of an adjacent toxic waste dump as groundwater levels rise. The Guidance should more clearly articulate the breadth and depth of environmental justice impact analysis that is necessary when siting and designing critical infrastructure.

**Suggestions for Specific Language Modifications**

To help meet some of the above suggestions, we propose the following specific modifications:

1. Adaptation and Consequences of Deferred Planning (page viii), *suggested modification*: "However, if California does not adapt the right way, and at the right time, the coastline could face irreparable harm. For example, oftentimes a solution embraced by coastal communities is to armor the shoreline to protect infrastructure. With sea levels expected to exponentially rise around mid-century, the window of opportunity for cities to establish non-engineered solutions (e.g., managed relocation) will close in many locations."
2. Introduction, page 16, *suggested modification*: "Moving forward, it will be extremely important to update LCPs to include land use policies and ordinances that implement sea level rise adaptation measures to protect vulnerable coastal resources and development, including critical infrastructure. Not having an approved LCP updated to consider sea level rise will increase administrative burden. Additionally, many of the combined stressors and nuanced impacts described in this document may fail to be considered or only be considered on an ad hoc basis."
3. Understanding the Probabilities, page 22, *suggested modification*: "Importantly, as is discussed in both the State of California Sea-Level Rise Guidance (OPC 2018) and the Coastal Commission Sea Level Rise Policy Guidance (updated in 2018), the recommendation is to understand and plan for the H++ scenario, not necessarily to site and design for the H++ scenario.~~In other words, it may not be appropriate or feasible to site or design a project today such that ite approximate H++ scenario in 2100 for much of the California coast). However, i~~[I]t is important to analyze this scenario to

understand what the associated impacts could be and to begin planning options to adapt to this scenario if and when it occurs, and to ensure that the risks and benefits of economic investments in critical infrastructure are fully understood. Critical infrastructure should also be sited and designed for the H++ scenario where the structure is very likely to exist beyond 2050 and where reoccurring impacts may occur to the structure and supporting public services to the site. If this is not possible, adaptation options with pathways that respond to the H++ scenario will be preferred. Special consideration to siting and design of critical water infrastructure should be given to the H++ scenario in order to ensure water supply reliability and to uphold California's commitment to the Human Right to Water.

4. Coordinated Planning Recommendations, page 53, *suggested addition*: "Pool funding and leverage resources by working with entities with shared adaptation objectives. Encourage cross-departmental collaboration with local jurisdictions; especially for holistic water management."
5. Adaptation Costs and Funding Recommendations, page 63, *suggested modification*: "Evaluate the costs and benefits of each adaptation alternative over the entire life cycle of the infrastructure rather than in 20- or 30-year increments, when performing alternatives analyses. All costs and benefits should be considered, including non-market and other difficult to quantify values. Equity and environmental justice considerations should also be evaluated — in particular 'who bears the cost' of particular decisions should be considered.'
6. Nature-Based Adaptation Recommendations, page 67, *suggested modification*: "Consider nature-based adaptation strategies in all sea level rise adaptation planning efforts and prioritize such solutions over proposals for hard shoreline armoring, whenever feasible. Where nature-based solutions are not possible, provide a clear explanation, and consider decisions that may increase their feasibility in the future.
7. Shoreline Protective Devices, page 94, *suggested edit*: "In situations involving the protection of these types of uses or structures, armoring may lawfully be allowed and may represent a reasonable short- to mid-term adaptation strategy. This may be especially true for protection of existing critical infrastructure where the armoring is the least environmentally damaging alternative within the context of phased adaptation responses. 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, protect public trust resources, and ensure equitable access to, and benefits from, coastal resources over time, all consistent with Coastal Act provisions. Shoreline armoring should not be expected to persist beyond its permitted purpose. Any permitted armoring must be accompanied

with a clear deadline for removal and restoration, and adequate authority for the city or state to enforce those conditions must be established.

**Seawater Desalination Should Be Added to Chapter 6**

In Chapter 6, Water Infrastructure, the Guidance states, "Although desalination facilities are located in the coastal zone, they are not covered in this Guidance due to the unique and complex issues associated with such facilities." Though "complex and unique" in certain ways, desalination faces similar siting issues and impacts on the coastal zone and should be incorporated in the Guidance. The unique complexities need to be specifically considered rather than left unaddressed.

The omission of seawater desalination misses an important need to ensure thoughtful consideration of the siting and design of this water supply option, especially as it relates to new facilities given sea level rise and climate change hazards. As the state grapples with increasing extreme climate events, including climate change related drought conditions, many communities are considering seawater desalination. Given the high cost, high energy consumption, and significant environmental impacts of desalination that have been elsewhere documented, desalination should be utilized only as a method of last resort.

The decisions we make about the siting and design of desalination facilities today will play a major role in the state's adaptive capacity to sea level rise – siting desalination plants has the potential to lock communities into industrial patterns of development along the coast that will prevent effective and equitable sea level rise adaptation. The Guidance should include thoughtful consideration of desalination given the increasing interest across the state and recommend policy solutions that will preserve coastal resources in conformance with the California Coastal Act.

As appropriately recognized in the Guidance, and as a long-term water supply option, seawater desalination qualifies as critical infrastructure and should be designed to the most stringent standards that increase resilience to the extreme sea level rise scenario. Desalination projects are clearly subject to the H++ sea level rise scenario under the State of California Sea Level Rise Guidance[4] and this Commission's Guidance should also explicitly categorize seawater desalination facilities as subject to the H++ sea level rise scenario.

The 2018 update of the Ocean Protection Council's 2018 State of California Sea- Level Rise Guidance document includes the following remarks which support the inclusion of desalination as critical infrastructure subject to the H++ scenario:

[4] https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf

> "For high consequence projects with a design life beyond 2050 that have little to no adaptive capacity, would be irreversibly destroyed or significantly costly to relocate/repair, or would have considerable public health, public safety, or environmental impacts should this level of sea-level rise occur, the H++ extreme scenario should be included in planning and adaptation strategies (e.g. coastal power plant)." (p. 24, 2018 OPC SLR Guidance)
>
> "For highly vulnerable or critical assets that have a lifespan beyond 2050 and would result in significant consequences if damaged, the H++ scenario (extreme risk aversion projection) should also be included in planning analyses." (p. 25, 2018 OPC SLR Guidance)
>
> We further recommend incorporating the H++ scenario in planning and adaptation strategies for projects that could result in threats to public health and safety, natural resources and critical infrastructure, should extreme sea-level rise occur. (p. 32, 2018 OPC SLR Guidance)

Where seawater desalination is truly needed (i.e., as a supply option of last resort)[1], or where a Regional Water Board has deemed a project needed and approved it, such that it is pursued instead of or before less impactful and less expensive alternatives, it logically follows that the project be considered a "high consequence project" with public health and safety depending on that project's water. This is particularly true where a project is approved on the understanding that it will provide emergency water supplies. Such a project, with people depending on its water for their health and safety, has a clear low tolerance for risk.

Accordingly, desalination projects are plainly subject to the H++ scenario under the State's Sea Level Rise Guidance. While we believe the Commission's Guidance document implicitly recognizes desalination facilities as "critical infrastructure" subject to the H++ scenario (e.g., p. 18), we encourage the Guidance to be revised to explicitly recognize this.

Chapter 6 must also demonstrate a preference for siting and designing new and redeveloped critical infrastructure to avoid coastal impacts from the H++ extreme sea level rise scenario. This chapter should include meaningful discussion about the importance of precautionary siting and designing water supply infrastructure in order to ensure water reliability and California's Human Right to Water commitment.

Finally, the Guidance should recommend evaluating the resiliency of interdependent public utilities and supporting infrastructure when evaluating critical projects. New infrastructure should not be permitted in hazardous locations where surrounding

supporting infrastructure such as roadways and utilities will be damaged by coastal hazards.

To summarize, we support the following modifications to Chapter 6:

1. Require siting and designing of new and redeveloped critical infrastructure to avoid coastal impacts from the H++ extreme sea level rise scenario, and otherwise clarify explicit preferences for adaptation pathways that respond to this scenario
2. Include seawater desalination as a type of project that should evaluate, plan, site and design to the H++ sea level rise scenario.
3. Recommend precautionary siting and design of water supply infrastructure in order to ensure water reliability and California's Human Right to Water commitment.
4. Recommend evaluating the resiliency of public utilities and supporting infrastructure for the siting and design of new critical infrastructure such as seawater desalination in accordance with the H++ extreme rise scenario.

**Conclusion**

The undersigned organizations thank this Commission and staff for your approach to managing critical coastal infrastructure vulnerabilities to sea level rise in the State of California. With power generation, desalination, wastewater, and nuclear facilities all adjacent to our coastline, this Guidance will help streamline local decision-making that will involve many community tradeoffs in the coming years. We look forward to supporting the Commission's ongoing leadership in protecting California's coastline for the future.

Sincerely,

Mandy Sackett
California Policy Coordinator
Surfrider Foundation

Laura Walsh
Policy Manager
San Diego Chapter
Surfrider Foundation

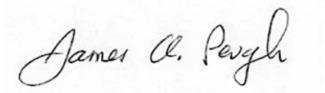
Susan Jordan
Executive Director
California Coastal Protection Network

Sara Ochoa
Programs Director
Coastal Environmental Rights Foundation

Garry Brown
Executive Director
Orange County Coastkeeper

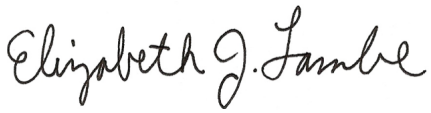
Livia Borak
Legal Director
Coastal Environmental Rights Foundation

Pam Heatherington
Executive Director
Eco San Diego

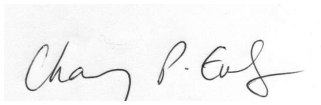


Jim Peugh
Conservation Committee Chair
San Diego Audubon Society

Patrick McDonough
Staff Attorney
San Diego Coastkeeper



Elizabeth Lambe
Executive Director
Los Cerritos Wetlands Land Trust



Charming Evelyn
Chair, Water Committee
Sierra Club Angeles Chapter
Sierra Club CA

Dave Hamilton
President
Residents for Responsible Desalination

Andrew Johnson
California Representative
Defenders of Wildlife

Emily Parker
Coastal and Marine Scientist
Heal the Bay

Andrea León-Grossmann
Director of Climate Action
Azul

September 22nd, 2021

California Coastal Commission
455 Market St, Suite 300
San Francisco, CA 94105

**Re: Comments on the report Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone**

Dear Members of the Coastal Commission,

Thank you for the opportunity to comment on the Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone, Public Review Draft, August 2021 (Draft). San Diego Audubon (SDAS) is a 4,000+ member non-profit organization with a mission to foster the protection and appreciation of birds, other wildlife, and their habitats, through education and study, and to advocate for a cleaner, healthier environment. We have been involved in conserving, restoring, managing, and advocating for wildlife and their habitat in the San Diego region since 1948. Our work has included community-led habitat restoration, training community scientists, educating students about the importance of natural habitats, responding to environmental documents, advocating for environmentally superior improvements for many public and private projects, and many other roles.

The following are concerns we hope will be considered as the Draft moves along to completion:

**Use of Consistent Terminology**

In Sea Level Rise (SLR) discussions, there is the vital component of future projections. The Draft uses the terminology "extreme risk or H++" to identify a scenario of 10 feet of SLR and mentions there are many other scenarios possible. What is missing is an explanation of what H++ is referring to or why that terminology is being used. In the cited document, State of California Sea-Level Rise Guidance, the opening pages discuss the Intergovernmental Panel on Climate Change (IPCC} which provide important data to countries around the world. The IPCC uses Representation Carbon Pathways (RCP) to describe a range of SLR scenarios with other important data. The Draft should include a discussion of what H++ is referencing and a brief discussion of RCP and other SLR metrics to inform the reader. The Draft should also consider using terminology consistent with other climate change planners outside of the state and the country. It is extremely helpful and productive when everybody is using the same language (metrics) in discussions of SLR scenarios when possible. The Draft should consider these issues and discuss its process on this important component moving forward in future publications.

**Environmental Ecologist Working Group**

The Draft provides guidance to Coastal managers and planners to consult with Coastal Commission staff early in the design process to discuss the potential for nature-based adaptation strategies. Table F-1 and F-2 in Appendix F, Nature-Based Adaption Strategies for California provide useful guidance. Formation of an Environmental Ecologist working group, affiliated with the Coastal Commission, would be a welcome addition. This working group would have knowledge of the challenges and wide-ranging benefits with nature-based solutions and would provide a beneficial conduit between coastal managers and the Coastal Commission.

**Climate Change Data Updates**

The Draft states in several instances that the Ocean Protection Council plans to update the State Sea-Level Rise Guidance approximately every five years. There is a lot of data that needs to be collected to provide accurate SLR projections and establish policies. However, the speed of changing weather patterns creating dangerous storms warrant a shorter time scale of disseminating recent SLR data to City and state officials. Perhaps every five years will have data sufficient for long-term planning, but annual or bi-annual updates will provide coastal mangers the information that they need to make appropriate "Phased Adaption" strategies as prescribed in the Draft. Assembly Bill 1482, cited in this Draft, requires all state agencies and departments to prepare for climate change by continuing collection of climate data. There needs to be a streamlined procedure to get recent relevant climate change data to the proper authorities. This is highlighted by the troubling example provided in this Draft, "Caltrans project to realign a 0.7-mile long segment of Highway 1 at Gleason Beach in Sonoma County to avoid coastal erosion as influenced by sea level rise – a milestone that resulted from almost fifteen years of planning and coordination…"

**Coastal Wildlife Habitat**

In the discussion of Adaptation Costs and Funding, the section on calculating the costs and benefits of different SLR adaptation strategies describes providing wildlife habitat as a non-market value. It is important to state that coastal wildlife habitat is **Location Dependent**. The habitat cannot be relocated inland as infrastructure can as it is dependent on its location for its very existence. This is an important concept and should be properly addressed in the Draft. For example, our existing eelgrass beds are facing severe threats going forward due to sea level rise. As they require shallow waters for photosynthesis, eelgrass beds will be forced to move up toward the coast, where they can be blocked by man-made barriers. Planning for these endangered coastal systems should therefore be given high priority. Table F-1 provides some brief descriptions of coastal habitats as nature based climate resiliency strategies, but critical ecosystem functionality fails to be addressed. Provide a procedure for coastal managers and planners to access this important information in the Draft.

**Natural Infrastructure and Man-Made Infrastructure**

We understand that your goal is to protect our man-made critical infrastructure from sea level rise, using natural solutions. However, natural infrastructure is facing severe threats from climate change and coastal development, the very infrastructure we are trying to protect. We ask that you recognize this potential conflict and plan for negotiating this fine balance between nature and man-made infrastructure. Strengthening natural infrastructure should be a priority as opposed to being an afterthought to critical infrastructure.

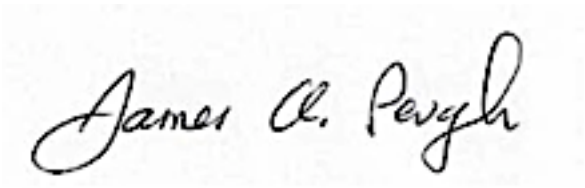
**Broader Case Studies**

We appreciate the case studies you have provided in your report and the mentions of plans to relocate critical infrastructure to expand nature-based solutions. Considering your acknowledgment of the need for more case studies on California's open coast, we ask that you include more studies on how conflicts between natural and man-made infrastructure were successfully negotiated.

Thank you for this opportunity to comment on the Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone Public Review Draft. Please keep San Diego Audubon notified regarding any further updates or major milestones on this issue. Thank you for your time and consideration.

Respectfully,

Jim Peugh
San Diego Audubon
Conservation Chair
peugh@cox.net



22 September 2021

**California Coastal Commission**
455 Market St, Suite 300
San Francisco, CA 94105

Dear Members of the Coastal Commission,

My name is Sree Kandhadai, a high school junior who is participating in the San Diego Audubon Advocacy Program this year. Our team is focusing on the protection of eelgrass beds. Only recently, the UN has declared climate change a "code red for humanity." With sea level rise on the horizon, we need to act fast.

Thank you for recognizing the value of natural infrastructure and nature-based adaptation strategies in your recent report, "Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone." We especially commend your five Nature-Based Adaptation Recommendations and were heartened to see eelgrass beds as a soft strategy for several environmental issues, as outlined in Table 1. One of your recommendations is to "Identify existing nature-based shoreline protection and consider opportunities to maintain, enhance, or expand these existing features." Thank you for including this point in your work to preserve our critical infrastructure.

We understand that your plan prioritizes protecting our man-made infrastructure using natural infrastructure. However, the natural infrastructure itself is threatened by coastal development. Our eelgrass beds—an important resource for carbon sequestration, ocean acidification amelioration, and nursery habitat for economically important marine life—are threatened by the rising sea level. As eelgrass beds need shallow water to photosynthesize, sea level rise will force eelgrass to move toward the coast, where man-made coastal infrastructure can block it. We ask that you recognize this potential conflict and address it in a way so that threatened natural ecosystems that can protect us have a fighting chance.

We appreciate the case studies you have provided in your report and the mentions of plans to relocate critical infrastructure to expand nature-based solutions, such as berms and dunes. However, the construction of such features requires dredging, as in the San Elijo Lagoon, and dredging can upset eelgrass beds, which need to be restored or relocated to preserve our important ecosystems. Considering your acknowledgment of the need for more case studies on California's open coast, we ask that studies on eelgrass be included in future reports. Similarly, case studies that demonstrate successful resolution of conflicts between man-made and nature-made infrastructure would be very helpful.

Thank you for this opportunity, and for making the protection of our coastal ecosystems a priority.

Sincerely,

**Sree Kandhadai**
10524 Abalone Landing Ter.
San Diego, CA 92130
sree.kandhadai@gmail.com

**On behalf of the Eelgrass Advocates:** Damian Herlevic, Padma Jagannathan, and Deanna Roldan

**From:** Tina Dickason
**To:** Coastal Statewide Planning
**Subject:** Re: Draft Critical Infrastructure SLR Planning Guidance
**Date:** Tuesday, August 17, 2021 11:52:05 AM

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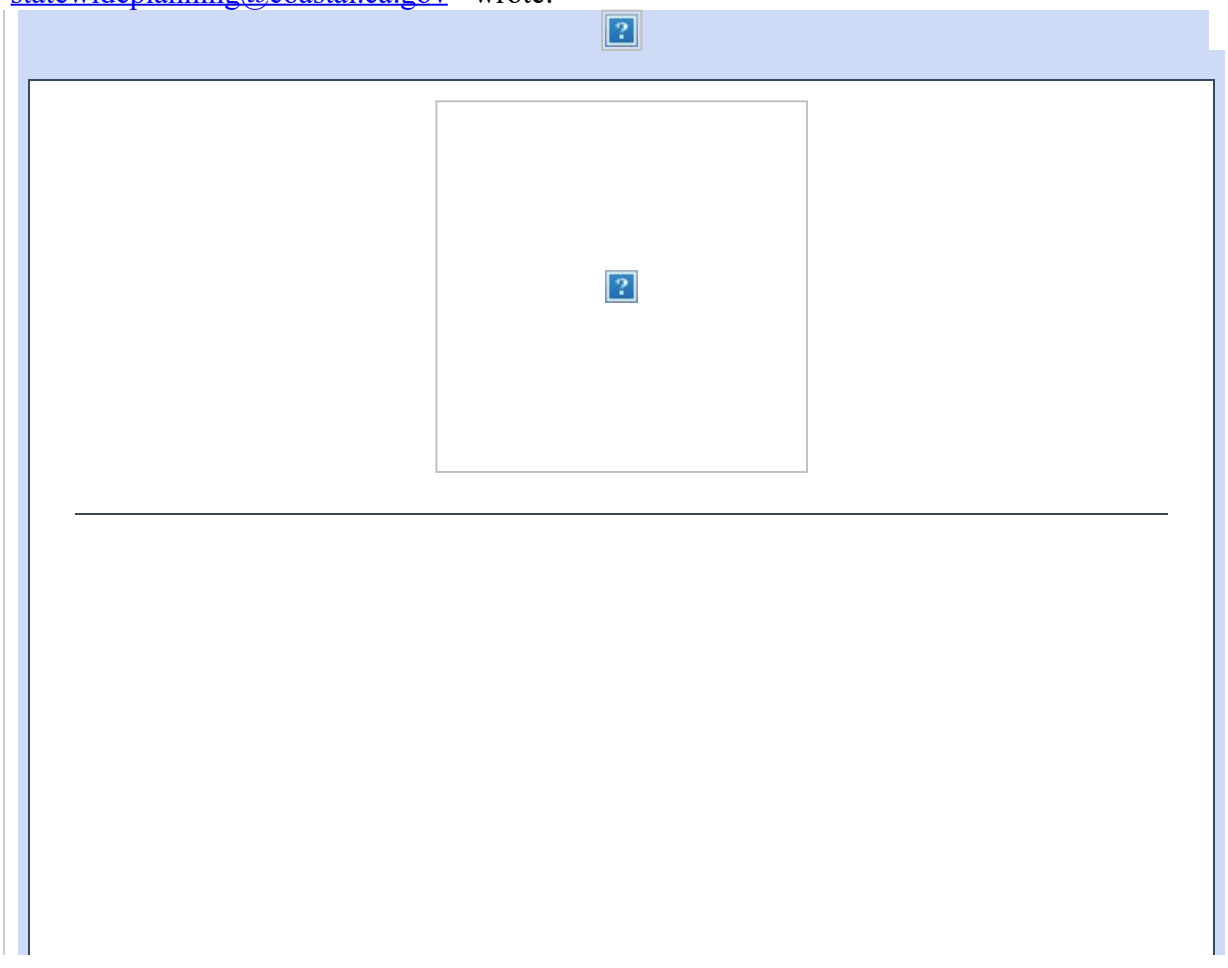
Thank you, for the report.

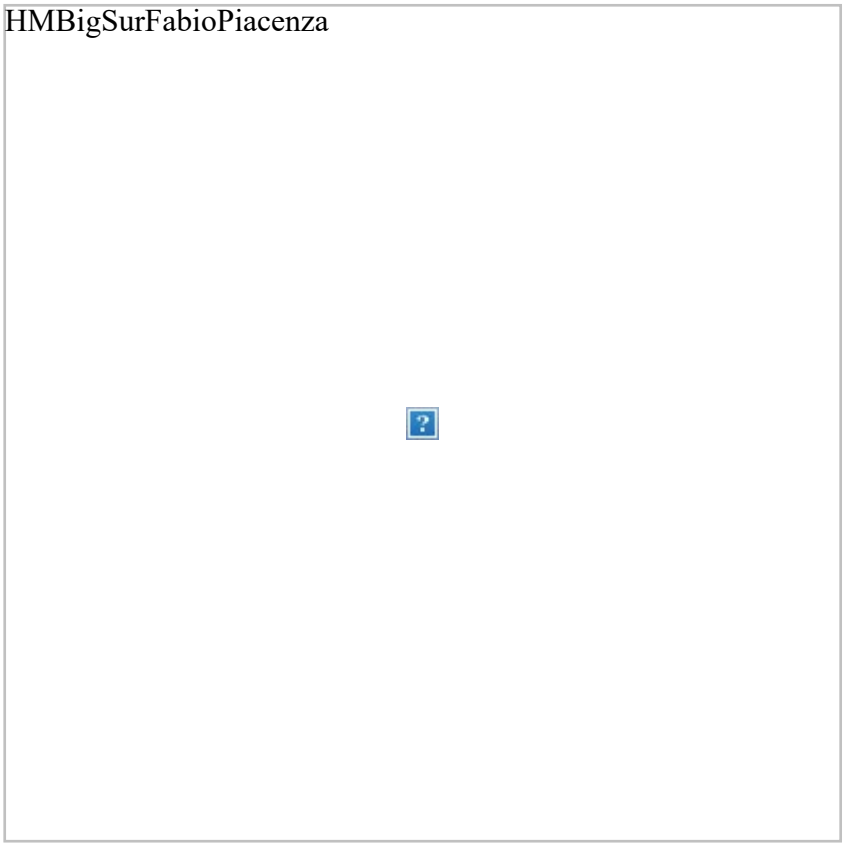
I have a question: Why was the Cambria Community Services District's (CCSD) Waste Water Plant (WWP) not identified on the map of vulnerable WWTP sites (page 100) of the report? The CCSD's WWTP is in a vulnerable area, within close proximity to the coastline, and has been identified as such in the past.

I would appreciate a response to my question. Was the location of the CCSD's WWTP overlooked in the report?

Respectfully,
Tina Dickason
Cambria resident

On Mon, Aug 16, 2021 at 5:34 PM California Coastal Commission <statewideplanning@coastal.ca.gov> wrote:






# Draft Critical Infrastructure SLR Planning Guidance Available for Public Comment

Coastal Commission staff is pleased to announce the release of the public review draft of **Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone**.

This Draft Guidance focuses on water and transportation infrastructure with a goal of promoting resilient coastal infrastructure and protection of coastal resources. The document provides local governments, asset managers, and other stakeholders with policy and planning information to help inform sea level rise adaptation decisions that are consistent with the Coastal Act. A press release about the document can be viewed here. The Coastal Commission welcomes public review and comment on this draft guidance.

**View the Draft Critical Infrastructure SLR Planning Guidance**

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Public comments on the Draft Critical Infrastructure SLR Planning Guidance can be sent to StatewidePlanning@coastal.ca.gov.

**Please submit comments by September 24, 2021**

**From:** Ngo, Anh T CIV USN (USA)
**To:** Coastal Statewide Planning
**Subject:** Sea Level Rise Guidance for Critical Infrastructure
**Date:** Friday, September 24, 2021 10:44:31 PM

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To Whom It May Concern,

I am submitting the following comments for consideration:

1. The economic justice section stating on page is highly opined and there is seems to be lack of justification on many of the statements. For example, there needs to be a connection on how loss of waters or disruption in day-to-day routines can result from disruption in wastewater/stormwater infrastructure. The paragraph on economic justice seems hypothetical and needs editing/justification on how conclusions are made.
2. Adaption and Retreat needs to evaluate and consider that in some areas, due to natural resources constraints, cultural resources constraints, or other environments, that realigning infrastructure is not possible. This will be evaluated during the CEQA/NEPA process and during the request for information process with engineers, who may decide to build UP in elevation rather than to retreat and impact other resources.
3. In some areas, based on geography, retreating and realigning is not possible. For example, SR-75 is a skinny isthmus connecting the City of Imperial Beach to Coronado, with utilities infrastructure built under the road alignment. There is no other available land to retreat/realign in this circumstance and they would have no other option but to keep the same alignment and to protect their existing infrastructure.
4. Due to sea level rise, if groundwater levels rise then water intrusion in potable water pipes is very likely and cross contamination issues is a potential that can arise. This can be an emergent issue for regulated public water systems that undergo compliance potable samples on a routine basis having to figure out where coliform or e coli is coming from in their drinking water system. All pipes leak, and if sewer pipes leak and groundwater levels rise and there is water intrusion in the potable pipes due to low water pressure, this can be a grave situation.

Very Respectfully,
Vicky Anh Ngo
CNRSW N40 NEPA Coordinator
750 Pacific Highway
San Diego, CA 92132
619-621-0925
Email: anh.ngo@navy.mil
Flankspeed: anh.t.ngo4.civ@us.navy.mil

"Thosewhocannotrememberthepast https://youtu.be/I5uloOJ5m1o can't adapt to 3.5' in30yrSLR?@ https://twitter.com/DouglasDeitch/status/1374672809163550720 toprotectvastmajoritywater/food/re assets w/o 1. http://sipodemos.democrat 2. http://dougdeitch.info: https://t.co/2L1RYOqKrl http://dougforassembly.com?" (https://twitter.com/DouglasDeitch/status/1426946751336914944)

Comments on "public review draft of Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone: "This Guidance focuses on adaptation of transportation infrastructure (Chapter 5) and water infrastructure (Chapter 6), including highways, roads, railroads, wastewater, stormwater, and water supply infrastructure."

1. " VAST majority of the water/food/RE resources of World's 5th biggest economy/Community are inextricably tied to SFBay/Delta/Sierra-Snowpak&CentralValleyag. CCC predicts 3.5ftSLR in 30 years@ http://documents.coastal.ca.gov/assets/slr/CCCendorsement_SLRPrinciples.pdf . 5:42@ http://sandiegorealestate.com Dr.Mount sez what 1 foot will do!" @ https://twitter.com/DouglasDeitch/status/1374672809163550720:

Analysis & Conclusions: Due to this 2020 3.5 ft. SLR by 2050 "planning guideline/projection" (and other reasons like possible COVID19 and other possible contamination of our waste waters which cannot be cleaned (@ https://twitter.com/DouglasDeitch/status/1426593026571313152)

Additionally, this is why we must immediately begin investigation of feasibility and advisability of damming the Golden Gate run down @ http://sipodemos.democrat

CA - DWR

Fair&Balanced! @ MakeCaliforniaGreatAgain.DEMOCRAT
@DouglasDeitch

Replying to
@CA_DWR
#CaWaterBoards https://twitter.com/DouglasDeitch/status/1401916742541013000

DPRisbest! like @ my "NAUTURAL SOLUTION" @ http://dougdeitch.info and 21000 acre Monterey Bay Estuarine Nat'l Monument in the Monterey Bay, which will include up to 31k/a/f/yr from Castroville Reclamation Plant repurposed to urban, recharge, and conservation uses from ag use in perpetuity, to wit:

https://twitter.com/DouglasDeitch/status/1411648137878380551

**"Douglas Deitch, Balanced Law and Order Liberal Democrat for State Senator**
September 14, 2019 ·
WELCOME TO www.DOUGDEITCH.info !!! ... Best SUSTAINABLE Monterey Bay region "SLR" (Sea Level Rise) water solution?
lomejorqueeldineroNOpuedecomprar.com / lawandorderliberal.org

My 21,000 acre "Monterey Bay Estuarine National Monument", etc. 'Water Fix" ..., of course.
The Castroville reclamation plant/project, run down @ http://montereyonewater.org/facilities_tertiary_treatment... ... , has the ability to produce over 31,000 acre feet per year of recycled tertiary treated water per year at it's plant, built in 1998 for around $75 million in Castroville.

This 31,000 acre feet/yr of water will be repurposed to urban use, further cleaned, processed, and distributed regionally and will easily supply and service all current and future Montrey Bay regionally urban water needs.

This will be accomplished by using the 12000 acres of land associated with this 31000 a/f/yr of water to it's highest and best use.

At present, this water is dedicated to exclusively ag use on 12,000 coastal ag acres at the mouth of the Salinas Valley to use instead of well water pumped at this location to protect the Salinas Valley from further salt water intrusion. As farmland, this land is FMV worth around $50,000 per acre as farmland ( https://www.santacruzsentinel.com/.../retired-federal.../ ). However, this 12,000 acres highest and best use is not as farmland but instead as a ground water conservation/aquifer recharge/ and estuarine habitat conservation/rehabilitation project, which actually doubles the FMV of this land to $100,000 per acre or $1.2 billion. This land comprises roughly something under 5% (?) of irrigated farmland in the "Salinas Valley"

If this 12000 acres was publicly acquired and fallowed/or all well pumping ceased, along with another tract of 9000 acres of irrigated farmland at the mouth of the Pajaro Valley running from approximately Elkhorn Slough to Manresa Beach on the ocean side of Highway One in Santa Cruz County for 21000 acres in total to protect the Pajaro Valley from salt water intrusion in the same way, ag well pumping would stop on this 21000 acres and, @ 3 a/f/yr per acre for ag water, 63,000 a/f/yr of ground water, would be CONSERVED annually per year in perpetuity. Additionally, wouldn't this 63,000 a/f/yr be also de facto RECHARGED at these two most hydrologically critically important locations with the highest quality recharge water possibly available with the lowest cost and best "GREEN tech" water available possible anywhere, in perpetuity as well, ... the recharge water produced and recharged naturally by our best water purveyor named Ms. Mother Nature?

Correct.

This is what I call the "Monterey Bay Estuarine National Monument", and it is truly a national monument with the highest concentration of critically threatened critical estuarine resources and habitat of ANY LOCATION ANYWHERE IN THIS COUNTRY !!! Here's my already successful 25 year old "Pilot Project" @ "Willoughby Ranch" @ Zmudowski Beach @ to check out @ www.dougdeitch.com & www.dougdeitch.info (this page)... "Farmlands back to wetlands"

Query: Where's the $2.1 billion?

Response: Reallocated rail bond money billions to "water/habitat/environmental projects" aka "OPM" (...other people's money) and INFRASTRUCTURE FUNDING.

2. "I wonder what the latest SCIENCE is today re: "Removing the novel coronavirus from the water cycle"& our ground water injection of "cleaned"? recycled/injection water projects like "Pure Water

Soquel"? Monterey San Diego etc?@ https://twitter.com/DouglasDeitch/status/1426593026571313152, which have already been approved and are in progress?

https://twitter.com/DouglasDeitch/status/1426593026571313152/photo/1?

3. SWRCB must intervene in Monterey Bay immediately to achieve sustainability and proper, legal, and responsible water management in the entire Monterey Bay @ https://twitter.com/DouglasDeitch/status/1375814806364594178/photo/1

4. The recent September 20, 2021 presentation by USGS and CCC staff (see attached images) on ground water and Sea Level Rise underlines and emphasizes the unadvisability and inherent risks and unknowns involved with our too many recent non DPR recycled water supply projects like Pure Water Monterey, Soquel, San Diego caused by sea level rise invading our ground waters despite our best efforts and intentions to prevent this.

At minute/second 5:41 @ the 12 minute VICE video at http://www.sanfranciscorealesatate.com , Dr. Jeff Mount in 2015 explains what just one foot of SLR will do to the Delta and the CCC plans for 3.5 feet SLR by 2050 ( @ https://documents.coastal.ca.gov/assets/slr/CCCendorsement_SLRPrinciples.pdf ) . So, just imagine what that same 1 foot of SLR will do to our coastal ground water, particularly in our already critically overdrafted coastal ground water basins and related new water supply infrastructure.

Now add to this uncontrolled and unplanned for increased ag coastal well pumping for new ag, such as is presEnt in the Pure Water Monterey area described in this Monterey Weekly article from a couple of years ago which will, at 5400 acre feet per year, completely offset the cleaned injected recycled water in the Monterey Pure Wqter expanded project.

Here is the MC Weekly 2018 article mentioned below @ https://www.montereycountyweekly.com/news/local_news/as-seawater-intrusion-advances-new-farmland-puts-marina-s-water-supply-in-peril/article_b35ca7e0-f66e-11e7-b541-57771b472126.html

"As seawater intrusion advances, new farmland puts Marina's water supply in peril.

- David Schmalz
- Jan 11, 2018
- Along Highway 1 just north of Marina, what has been grassland for decades is turning into row crops. A look at satellite images on Google, stretching back to 1984, shows that farming on the property, known as Armstrong Ranch, started in 2014 just south of the Marina landfill.

Expect that trend to continue: On Nov. 21, 2017, Valle Del Sol Properties LLC bought 1,784 acres of Armstrong Ranch for $81.5 million. (Monterey County Assessor Steve Vagnini says the price per-acre, just over $45,000, is in keeping with local agricultural land values.)

Three new ag wells have been drilled on the property since 2015, and an application for another is currently being processed by the county. But here's the rub: The wells are pumping from an ancient, finite water source. It's the same water source that residents of Marina and the former Fort Ord rely upon for their municipal water production.

The property's groundwater – in both the 180 – and 400-foot aquifers, named for their respective depths – is impaired by seawater intrusion, a process that occurs when excessive pumping creates a pressure differential that draws seawater into the aquifers, fouling their water with salt.

The only groundwater available to irrigate the property is in the so-called deep aquifer, an ancient groundwater supply 900-plus-feet underground that is not recharging through natural mechanisms. Scientists believe the water is probably more than 20,000 years old.

The only recharge to the deep aquifer, hydrologists say, comes from leakage from overlying aquifers. In the coastal area around Marina, those aquifers are already compromised by seawater intrusion, making them unusable as municipal or irrigation water supplies.

Pumping from the deep aquifer is considered "water mining," and has long been viewed as a last-ditch water supply that is both expensive to tap – it costs upwards of $1 million to drill a well into it – and risky to rely on because its quantity is unknown. Yet Marina Coast Water District, which supplies the city of Marina and the former Fort Ord, pumps roughly 50 percent of its water from the deep aquifer. (In 2017, that came out to 1,587 acre-feet of 3,239-acre feet.)

In October, Howard Franklin, senior hydrologist with the Monterey County Water Resources Agency, presented six recommendations to the County Board of Supervisors to help combat worsening seawater intrusion.

Among those recommendations was a moratorium on new wells in the deep aquifer until a study determines its viability as a water supply..."

"All wells in the deep aquifer are of concern with respect to the recommendations," Franklin says. "This is an urgent situation. This is imminent."

According to Michael Cahn, an irrigation water resources adviser with UC Cooperative Extension in Salinas, an acre of strawberries requires about 2.5 to 3 acre-feet of water annually.

That means if the entire 1,784 acres were converted to strawberries, it would require in excess of 4,000 acre-feet of water annually – more than Marina Coast's current annual production.

Franklin, when articulating the urgency of the situation for Marina Coast, and others that rely on the deep aquifer, says the human-caused mechanism of recharge for the deep aquifer – leakage from overlying aquifers – does not happen easily, or quickly, but that it will happen in a matter of years.

"The damage is being done now, and the impact of that damage could be 10 years from now, but if you [pump the deep aquifer] today, the damage will occur," Franklin says. "You're putting into motion mechanisms that take a long time."

Marina Coast does not have jurisdiction over new agricultural wells on Armstrong Ranch.

"It's on our radar, and we're concerned about it, but we're not necessarily in the loop," Marina Coast General Manager Keith Van Der Maaten says. "Unfortunately, I don't think we're as involved as we should be. We should have a more active role."

The county's Environmental Health Bureau processes applications for new wells, but while projects for residential water supplies face a gauntlet of bureaucratic hurdles, wells for agriculture are typically approved without any pushback.

That may change in the coming years with the formation of the Salinas Valley Groundwater Sustainability Agency, but ag wells in the region have so far have faced minimal regulation.

Marina Coast is currently exploring new potential water supplies, other than desalination. The agency is vying for up to $1 million in state grant funds – the grants will be awarded in February – to study water storage options in the aquifers around Armstrong Ranch.

The project would potentially seek to store excess winter flows in the Salinas River, which would make it similar to the Monterey Peninsula's aquifer storage and recovery project in the Seaside Basin, where winter flows are pumped from Carmel River and injected underground.

Theoretically, Van Der Maaten says, Marina Coast could produce between 2,000-8,000 acre-feet of water annually with the project, and even send some of the water north to Castroville.

But he says there are still many unknowns, including whether it is technically feasible, whether Marina Coast could secure the water rights to those flows, and whether it would be economically feasible for Marina Coast to supply Armstrong Ranch farmland with water so that they stop pumping from the deep.

Van Der Maaten knows it won't be easy, but the mission is clear: "We absolutely need to get into this deeper, and get people off the deep aquifer."