Re: August 2019 hearing item W11a - Application No. 1-18-1078 (California Dept. of Transportation (Caltrans), Humboldt Co.)

Dear Commissioners,

On behalf of our organizations and the thousands of members we represent throughout California, we submit these comments on the Eureka-Arcata 101 Safety Corridor Improvement Project, CalTrans Application No. 1-18-1078, in Humboldt County.

Humboldt Baykeeper works to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community, and is a member of the California Coastkeeper Alliance and the international Waterkeeper Alliance. Surfrider Foundation is a national organization dedicated to the protection and enjoyment of the world’s ocean, beaches and waves, and has 20 chapters in our California activist network.

**Bay Trail and Special Condition 4**

We first wish to extend our deep gratitude to the Commission for the conditions of the 2013 federal consistency certification for the Project (CC-016-13), which resulted in the partial completion of the Coastal Trail along Humboldt Bay, known as the Bay Trail (the remaining section is in the planning stages). The Bay Trail has been a dream for decades, and despite the CalTrans “Complete Streets” directive to provide safe non-motorized access to road projects and bridge replacements, we have little doubt that it would still be just a dream without the conditions placed on the Project by the Commission.

We strongly support Special Condition 4, which requires safe bike/pad access to the Bay Trail from the proposed interchange. **However, we continue to be concerned that planned closures of other medians in the Project area will block important non-motorized access to the Bay Trail, requiring longer and more dangerous commutes for cyclists, particularly with the specter of increasing the speed limit on the Corridor where people will undoubtedly cross the highway rather than take long detours.**
Removal of Three Billboards on Public Trust Lands

We are pleased that the federal consistency certification resulted in the removal of many billboards along Humboldt Bay. Unfortunately, CalTrans proposes to allow four billboards to remain in the immediate vicinity of the interchange. These four billboards are in conflict with the Humboldt Bay Area Plan, which states that:

The shoreline of Humboldt Bay in the vicinity of the proposed interchange is designated as a Coastal View Area in the Humboldt Bay Area Plan at Section 3.40 (B)(4), which states that “no development shall block coastal views to the detriment of the public” and that “No off-premise signs shall be permitted” (3.40 (B)(4)(a)).

The three billboards that are slated to remain on Tideland Location 256 (billboards 6269, 6277, and 6278) are in conflict with Humboldt Bay Harbor, Recreation, and Conservation District Ordinance 7, Article IV, Section 9 (f), which states that:

Signs and related structures, other than those that are necessary and approved by the District for navigational, public safety, resource management and identification purposes shall be eliminated and prohibited from the tidal and submerged lands within the jurisdiction of the District.

In addition, all state agencies have an affirmative duty to undertake a public trust doctrine consistency analysis for projects that may impact trust resources, such as projects occurring on submerged lands. (San Francisco Baykeeper, 242 Cal.App.4th 202, 242.) Here, the record does not demonstrate any public trust doctrine consistency analysis has occurred.

All four billboards on the bay side of 101 are located on North Coast Rail Authority (NCRA) easements, according to the CalTrans billboard analysis. Many of the billboards that have been removed were located on NCRA easements, and the NCRA has requested billboard removal for many years. We request that removal of the four billboards on the North Coast Rail Authority easements or right-of-way, including the three billboards located on public trust tidelands, be included as a condition of the CDP.

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2 NCRA letter to CalTrans, Oct. 18, 2010 (enclosed).
3 See comments submitted by ATA Law Group, July 16, 2019, on our behalf in the July 26, 2019 staff report for the Project.
Preparing for Sea Level Rise

According to a CalTrans report released in May, the section of highway from Eureka Slough to the former California Redwood Company mill is projected to be inundated by 2030. The Commission’s staff report for the Aug. 7 hearing states that “significant portions of the highway corridor will be flooded with SLR as little as 1.6 feet, which could occur by 2040.” Local sea level rise projections predict that the area could be inundated by 1.6 feet of sea level rise at Mean Monthly Maximum Water (MMMW) (Figure 1).

Figure 1. Tidal inundation area with sea level rise of 1.6 feet at MMMW elevation of 7.7 ft (NAVD 88).

The 2019 Caltrans analysis acknowledges that dikes protect much of the project area. The southern segment of the corridor is at risk of being tidally inundated – which could happen now.

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5 Exhibit 26: Caltrans District 1 and ICF Consulting, May 21, 2019. Eureka-Arcata Corridor: Sea Level Rise Vulnerabilities and Adaptation Solutions.
6 Northern Hydrology & Engineering, 2014.
7 Exhibit 26: Caltrans District 1 and ICF Consulting, May 21, 2019. Eureka-Arcata Corridor: Sea Level Rise Vulnerabilities and Adaptation Solutions.
by MMMW if the earthen dikes east of the Murray Field Airport runway on Fay Slough are breached or overtopped.

According to Aldaron Laird’s 2013 shoreline vulnerability assessment, the majority of the dikes along the Corridor are moderately to highly vulnerable to breaching with current sea level. By 2040, if not before, with 1.6 feet of sea level rise, dike segments (see red sections on Figure 2) on Fay Slough are at risk of being overtopped during MMMW events. If this were to occur, both the north- and southbound lanes in the southern segment would be inundated by tidewater (see Figure 1).

Figure 2. Shoreline elevation above the MMMW elevation of 7.7 ft (NAVD 88): red <2 ft, yellow = 2-3 ft, and green > 3 ft, on Eureka Slough and Arcata Bay.⁸

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The maximum water level measured at the North Spit tide gauge is 9.54 feet (NAVD 88 datum), on December 31, 2005. A hundred-year event at the gauge is 10.2 feet. The Governor declared a state of disaster in the wake of that New Year high water of 9.5 feet. The mean annual maximum water (king tide) elevation at the gauge is 8.8 feet. So with just 0.7 feet of sea level rise our king tides will result in water levels that have been declared a state of disaster on Humboldt Bay.

OPC’s most recent projection for sea level rise is 1.0 feet by 2030. We need to act now to protect assets that are vulnerable to tidal inundation without sea level rise by MMMW (Highway 101 on South Bay and lower Arcata Bay), if protective shoreline structures are breached or overtopped.

Despite these projections, past flooding during king tides, and the Coastal Commission’s 2013 conditions, the staff recommends that CalTrans develop a sea level rise plan by 2030, or within a year of the first time the highway is flooded four times in a 12-month period.

We’ve consistently raised concerns about CalTrans’ plan to construct a highway interchange in a low-lying area along Humboldt Bay without consideration of sea level rise. But rather than spending the last 10 years planning for a long-term approach – such as a causeway to elevate the highway and allow the bay to expand beneath it – CalTrans plans to apply 20th century solutions to 21st century problems.

Figure 3. All that stands between U.S. Highway 101 and Humboldt Bay is the 19th century system of unmaintained earthen dikes along the former rail corridor. Photo by Nancy Stephenson for Humboldt Baykeeper’s King Tides Photo Initiative, Oct. 28, 2015.

CalTrans’ short-term sea level rise plan is to rebuild higher dikes. But the long-term impacts of “shoreline armoring” would be devastating to what little salt marsh remains around the bay – the marshes would basically drown unless there is a plan to allow them to migrate to higher
ground as sea level rises. Salt marshes and eelgrass beds are critical habitat for many fish, shellfish, and migratory bird species, and are important for maintaining water quality. The entire 101 Corridor is also in the 100-year flood zone, and is also vulnerable to tsunamis and soil liquefaction. These hazards will worsen as sea level rises, especially during major storms.

Of the Corridor’s 5.86 miles, all but 0.24 miles are in the state retained jurisdiction area. All of the land adjacent to the highway, except the 0.24-mile segment at Bracut, is also in the state-retained jurisdiction area. As a result, the Commission is the lead on this project, and should require fellow state agencies such as CalTrans to be the leader in planning for sea level rise. Waiting for the LCP authorities and private landowners to take the lead on planning for sea level rise across multiple disjunct jurisdictions has been problematic, despite the Commission’s LCP planning grants.

Waiting to develop a long-term sea level rise plan until Highway 101 is closed by flooding four times in a year is unacceptable. Re-routing Highway 101 traffic along the narrow and winding Old Arcata Road/Myrtle Avenue and/or Highway 255, which bisects the rural town of Manila, four times a year would increase danger to drivers and pedestrians alike. CalTrans can do better than putting this off for another decade. **We ask the Commission to require CalTrans to immediately develop and incorporate long-term adaptation plans that protect Humboldt Bay’s habitat prior to approving this project.**

**Wetland Mitigations**

Although we support the mitigation plan for Spartina eradication in perpetuity, the on-site wetland mitigation plan is concerning. As one of 12 plans that are in draft form and deferred to a later date, the on-site mitigation plan focuses on restoring small, disjunct fragments of wetland adjacent to the highway or in the median. **We urge the Commission to condition the project to require mitigations for the Project’s wetland impacts to focus on restoring larger areas of functional wetland habitat, with a focus on enabling salt marsh to migrate inland and upland as sea level rises.** Otherwise, the short-term plan to raise and reinforce the dikes with result in elimination of the little remaining salt marsh around Humboldt Bay as it is drowned with nowhere to recolonize.

Thank you for the opportunity to comment on this important project – and thank you for insisting that this Project be postponed until the scheduled North Coast Commission hearing.

Sincerely,

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