



February 5, 2018

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Richard Brody
California Department of Fish and Wildlife
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Submitted via email to: daniel.p.swenson@usace.army.mil and BWERcomments@wildlife.ca.gov

Re: Comments on the Draft Environmental Impact Statement/Environmental Impact Report for the Ballona Wetlands Restoration Project; Support of Alternative 1 with modifications

Dear Mr. Swenson and Mr. Brody:

On behalf of Heal the Bay, we submit the following comments on the Draft Environmental Impact Statement/Environmental Impact Report for the Ballona Wetlands Restoration Project (“Draft EIR/S” or DEIR/S”). Heal the Bay supports the joint comment letter submitted by the Wetlands Restoration Principles Coalition Steering Committee and provides additional comments here. We appreciate the extended public comment period and the opportunity to provide comments.

Heal the Bay is an environmental organization with over 30 years of experience and 15,000 members dedicated to making the coastal waters and watersheds of greater Los Angeles safe, healthy, and clean. Heal the Bay has advocated for, initiated, and participated in numerous riparian and wetland habitat restoration projects throughout our history. Heal the Bay was a leader in over twenty years of research and advocacy that lead to the successful restoration of Malibu Lagoon in 2013. That estuary was impacted by fill and upstream pollution, and suffered from poor circulation, low dissolved oxygen, eutrophication and poor biodiversity. In the five years since the Malibu Lagoon restoration plan was implemented, the health of the Lagoon has improved immensely. Endangered fish and birds are present in the Lagoon, dissolved oxygen is higher, nutrient levels are lower, and biodiversity is increasing.¹

¹ Malibu Lagoon Restoration and Enhancement Project Comprehensive Monitoring Report (Year 4), August 31, 2017. http://www.santamonicabay.org/wp-content/uploads/2014/04/Malibu-Lagoon_YR4-Report_FINAL_Aug2017.pdf viewed on 2/1/2018.



Heal the Bay's long involvement with the Ballona Wetlands includes supporting the purchase of the land by the State of California, providing technical guidance on the creation of the Freshwater Marsh in Area B, and working closely with Congresswoman Jan Harman to improve tide gate management in West Area B, which resulted in substantial improvements in hydrology and biodiversity in a limited portion of Area B. Heal the Bay participated in design workshops hosted by the State Coastal Conservancy and The Bay Foundation, and supported public outreach and tours of various parts of the Ballona Wetlands Ecological Reserve. This outreach served to increase public awareness of this degraded habitat and the enormous potential for ecological improvements and world-class public amenities such as trails and outdoor education facilities.

The restoration of Ballona Wetlands for habitat and public access is long overdue. Public demand for recreational open space and restoration of natural habitats in Los Angeles is enormous. In 2003 the state of California completed their acquisition of over 600 acres that is now the Ballona Wetlands Ecological Reserve. The Ballona Wetlands are listed on the state's Clean Water Act Section 303(d) list of impaired water bodies for "reduced tidal and freshwater flow to support habitat and aquatic life."² Nearly all of the Reserve has remained in an extremely degraded state since it was purchased, with virtually no public access. In a densely populated urban metropolis facing the combined pressures of lack of public open space, loss of biodiversity, polluted water and sea level rise, the Ballona Wetlands is a critical component of our region's natural infrastructure. A robust, science-based restoration designed for habitat enhancement, water quality improvement and public access and will be an asset to health and quality of life in our region and a prized jewel of the LA County coast.

The Draft EIR/S provides a thorough analysis of current conditions and potential projects. Alternative 1 is clearly the best alternative to meet the seven stated goals of the State of California, which include among others: to restore, enhance, and create estuarine and associated habitats; establish natural processes and functions that support estuarine and associated habitats; and develop and enhance wildlife-dependent uses and secondary compatible on-site public access for recreation and educational activities (pages ES-8-ES-10, Draft EIR/S).

Heal the Bay supports implementation of Alternative 1 with three modifications to the plan. Our support for Alternative 1, the necessary modifications to the plan, and our comments on the other Alternatives and details of the Draft EIR/S are provided below.

Alternative 1 Best Achieves the Goals of the State

The restoration of the Ballona Wetlands should restore, enhance, and create functioning wetland habitats that are resilient and self-sustaining and provide benefits for native species as well as

² U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at: <https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>



increased public access for education and enjoyment. Specifically, the restoration plan must include:

- Removal of significant amounts of legacy fill and sediment that has been placed on the wetlands, causing severe impairment of natural wetlands functions
- Removal of concrete levees along Ballona Creek to reconnect the Creek to its floodplains and the wetlands
- Restoration and/or creation of wetland habitats including subtidal, low marsh, mid and high marsh, and salt pan habitats
- Wetland habitats that support diverse, rare, and sensitive species of plants and animals
- A project with maximal self-sustainability and minimal required on-going maintenance
- A project that accounts for and adapts to sea level rise, providing maximal long-term benefits
- A project that creates publicly accessible trails and educational opportunities that are compatible with ecological goals

Alternative 1 Restores and Enhances Habitat

Alternative 1 in the DEIR/S will best achieve these goals for the Ballona Wetlands. Historically, the greater Ballona Wetlands complex was comprised primarily of salt marsh habitat (1238 acres or 70%)³; today, the remaining Wetlands are much reduced in size and only have 18.2 acres of muted (not fully functional) salt marsh (Table 2-3, page 2-45, Draft EIR/S). In total, the limited tidal salt marsh and non-tidal impaired salt marsh make up 25% (or 155 acres) of the current Wetlands.⁴ Salt marsh is the habitat that has primarily been lost in the Ballona Wetlands and must now be restored or created. Alternative 1 is the preferred plan because it restores, enhances, and creates the greatest number of acres of tidal salt marsh habitat at 153.4 acres (Table 2-3, page 2-45, Draft EIR/S), relative to all the other alternatives (124.3 acres in Alternative 2, 42.8 acres in Alternative 3, and zero acres in Alternative 4; see pages 2-163 and 2-188, Draft EIR/S). The Environmental Protection Agency (EPA) Total Maximum Daily Load (TMDL) lists the Wetlands as impaired for reduced tidal flushing⁵; the State must implement Alternative 1 to reverse the 303(d)-listed impairments and result in the most tidal salt marsh habitat.

Alternative 1 Restores Tidal Flows

The Ballona Wetlands are on the state's Clean Water Act (CWA) Section 303(d) list of impaired water bodies for "reduced tidal and freshwater flow to support habitat and aquatic life."⁶ The EPA TMDL for the Ballona Wetlands identifies the stressors causing this impairment as the levees and tide gates that prevent connection of the creek to the floodplain, and do not allow the wetlands to experience a full range of tides.⁷ Alternative 1 is the only alternative that removes all the concrete

³ U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at: <https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>, Table 6 and Figure 14.

⁴ Ibid, Table 7 and Figure 14.

⁵ Ibid.

⁶ Ibid, Table 4, page 33.

⁷ Ibid.



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levees along Ballona Creek, including the tide gates that currently prevent a full tidal range in West Area B. Alternatives 3 and 4 do not meet the State's restoration goals because they do not fully reconnect the Creek with its floodplains or fully restore tidal flushing. Alternative 2, while removing significant amounts of concrete levees along the Creek, falls short in reconnecting West Area B hydrologically to the Creek and maintains in perpetuity the tide gates that currently prevent full tidal flushing in that area. The removal of concrete along this portion of Ballona Creek will set a precedent for further concrete removal along other sections of the Creek and in other urban watersheds.

Alternative 1 Reduces Sediment Impairment

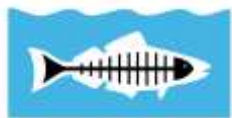
The Ballona Wetlands are also on the state's CWA Section 303(d) list of impaired water bodies due to excess sediment, and Alternative 1 is the plan that best addresses this impairment. The excess sediment was dumped onto the Ballona wetlands in the 1960s when Marina del Rey was constructed, and raised the elevation in Areas A and C well above tidal influence. The dumped sediment, combined with the construction of concrete levees to channelize Ballona creek, have prevented tidal influence in those areas (with the exception of the small drainage known as Fiji ditch). This is the major cause of the loss of wetland habitat, the alteration of habitat composition, and the loss and modification of species diversity and abundance in Areas A and C.⁸ Due to existing infrastructure including major roads and bridges and existing recreational facilities on Area C, the most practical way to achieve new wetland habitat is to remove the excess sediment from Area A.

Alternative 1 removes the greatest volume of sediment from Area A, between 2,400,000 to 2,430,000 cubic yards (Table 2-8, page 2-120, Draft EIR/S). Alternatives 2 and 3 remove 2.09M cubic yards and 1.42M cubic yards respectively (Tables 2-24 and 2-28, Draft EIR/S). Alternative 4 removes zero cubic yards of fill. Alternative 1 removes the most excess sediment and will best achieve habitat that is at an appropriate elevation to maintain a connection to the Ballona estuary, and contribute to a healthy, functioning wetlands system.

Alternative 1 Improves Local Resilience to Climate Change

Alternative 1 creates the greatest local resiliency to climate change and sea level rise. Alternative 1 will extend the lifetime of the salt pan by approximately 20 years (by protecting it from sea level rise and flooding) and will allow habitat to advance inland and upslope as sea level rises. The salt pan is a unique habitat that provides overwintering, foraging, and nesting habitat for many species of birds. In contrast, Alternatives 2, 3, and 4 will result in loss of the salt pan in West Area B more rapidly, likely before 2050. Further, the tide gates in West Area B are predicted to fail between 2030 and 2050, and the tide gates would then be permanently closed due to sea level rise; West Area B would become permanently flooded or a mudflat at that point. Establishing natural processes with minimal reliance on on-going maintenance (such as pumping water) are important elements of a successful project. Restoring West Area B to fully tidal will create greater resiliency

⁸ U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at: <https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>



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and space for habitat to advance as sea level rises; habitat will be able to transition within West Area B and also retreat towards South Area B.

Alternative 1 Provides the Greatest Level and Quality of Public Access

Alternative 1 results in the most opportunities for well-regulated public access through pedestrian and bike paths. Alternative 1 would result in the creation of 19,000 linear feet (approximately 3.6 miles) of pedestrian and bicycle paths (Page 2-100, Draft EIR/S) as well as 29,000 linear feet of pedestrian only trails and 2,000 linear feet of elevated boardwalks (Page 2-106, Draft EIR/S). The exact amounts of trails for the other Alternatives are not clearly stated in the Draft EIR/S but based on the figures showing the Public Access Plans for Alternatives 2 and 3 (Figures 2-45 and 2-54, respectively, Draft EIR/S), it appears that Alternative 1 has the most paths. Alternative 2 has less extensive pedestrian trails in Area A and West Area B; however, Alternative 2 does have a bike path around East Area B where Alternative 1 does not (Figures 2-23 and 2-45, Draft EIR/S). Public access in Alternative 3 is greatly reduced compared to Alternative 1, with virtually no access in Area B (Figure 2-54, Draft EIR/S). Alternative 4, or the no project alternative, is not an option given that there is basically no public access now, which is unacceptable given that it is State land and open space in the middle of urban Los Angeles. Clearly, care needs to be taken to balance access with ecological benefits and the restoration project is a prime opportunity to increase educational and recreational opportunities in this open-space gem.

Support for the Draft EIR/S and Alternatives Analyzed

We commend the hard work and detailed analysis that went into the preparation of this long-awaited document. We acknowledge the work of CDFW, USACE, and countless other agencies and groups that have added to the body of knowledge of the Ballona Wetlands and upon which this document is based. Specifically, we applaud the Draft EIR/S for exploring appropriate alternatives and carrying forward analyses of the alternatives that are feasible and best meet the goals of the project. Heal the Bay would love to see a project in which the fragmentation of the wetlands is reduced by removing or raising surrounding roads (as explored in Alternative 9, page 2-217, Draft EIR/S). However, we understand that this Alternative is not feasible given the extensive infrastructure that would have to be moved and protected; further, this would nearly double the cost per restored acre for all alternatives. We appreciate that the Draft EIR/S examined this Alternative and clearly justified the reasons for not carrying it forward for further analysis.

Similarly, we appreciate that the Draft EIR/S considered the possibility of returning the Ballona Wetlands to a historical, specifically, 19th century state (Alternative 11, page 2-234, Draft EIR/S). The Draft EIR/S finds that a proposal to return the wetlands to a seasonally closed lagoon (coastal bar-built estuary system) is not reasonable and we agree. “Restoring” to a specific point in time is not typically possible for any restoration in urban environments, due to present-day constraints that did not exist 200 years ago. Further, restoring to a specific point in time ignores future threats, such as climate change and sea level rise and is therefore not responsible policy or use of public funds.



It is possible and appropriate to use the known historical ecology of the Ballona Wetlands and other coastal California wetlands as a basis for setting overall habitat restoration goals. For instance, the Ballona Creek Wetlands EPA TMDL for sediment and invasive exotic vegetation⁹ sets objectives based on historic elevation ranges and habitats at Ballona Wetlands and similar wetland systems in Southern California. The TMDL relied upon credible sources such as the historical T-sheet map¹⁰ for the Ballona Wetlands as well as historical ecology studies¹¹. The Draft EIR/S acknowledges the Ballona Wetlands TMDL and while the restoration alternatives do not explicitly meet all the load allocations set in the TMDL, the Draft EIR/S uses dual approaches to achieve sediment removal and restoration of historical tidal wetland habitats. The Draft EIR/S appropriately considers and aims for historical wetlands habitats while accommodating current and future constraints.

Further, arguments have been made for restoring Ballona Wetlands to a historical state as a predominantly freshwater wetland. However, as described above, it is not appropriate to restore any wetlands to a specific point in time without considering current and future constraints. Additionally, it is not clear that the Wetlands were predominantly freshwater. The EPA TMDL defines the Ballona Wetlands as a “tidal marsh-tidal flat dominant system”¹² and based on the historical ecology¹³, the freshwater wetlands were further inland than the extent of the proposed restoration project. The TMDL specifies that the 303(d) impairment listing is for “reduced tidal flushing” and acknowledges that compared to freshwater inputs, “...the more limiting factor, comparatively, is a significant reduction in tidal flow.”¹⁴ The EPA TMDL shows a graph (copied below) of habitat proportions for Greater Ballona Wetlands Complex (1752 acres), current Ballona Wetlands, and Historical Ballona Creek Wetlands (626 acres).¹⁵ The graph shows that there was some freshwater marsh in the project area historically (approximately 10%) but the primary loss of habitat compared to historical conditions is in the loss of salt marsh habitat. We do acknowledge that historically, the Ballona Creek Wetlands were typically closed to the ocean and only opened periodically during storms; however, returning to a periodically closed lagoon system is infeasible

⁹ U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at:

<https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>

¹⁰ Grossinger R et al. 2011. Historical Wetlands of the Southern California Coast: An Atlas of US Coast Survey Sheets, 1851-1889. San Francisco Estuary Institute Contribution No. 586 and Southern California Coastal Water Research Project Technical Report No. 589.

¹¹ Dark S et al. 2011. Historical Ecology of the Ballona Creek Watershed. Southern California Coastal Water Research Project Technical Report no. 671.

¹² U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at:

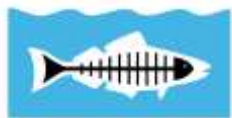
<https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>, page 14.

¹³ Dark S et al. 2011. Historical Ecology of the Ballona Creek Watershed. Southern California Coastal Water Research Project Technical Report no. 671

¹⁴ U.S. Environmental Protection Agency. 2012. Ballona Creek Wetlands Total Maximum Daily Loads for Sediment and Invasive Exotic Vegetation. Available at:

<https://www3.epa.gov/region9/water/tmdl/ballona/BallonaCreekWetlandsTMDL-final.pdf>, page 32.

¹⁵ Ibid, page 43.



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given current infrastructure. Therefore, given current constraints and feasibility issues, future sea level rise, and historical ecology evidence, moving forward with a restoration that emphasizes estuarine tidal wetlands is the best option.

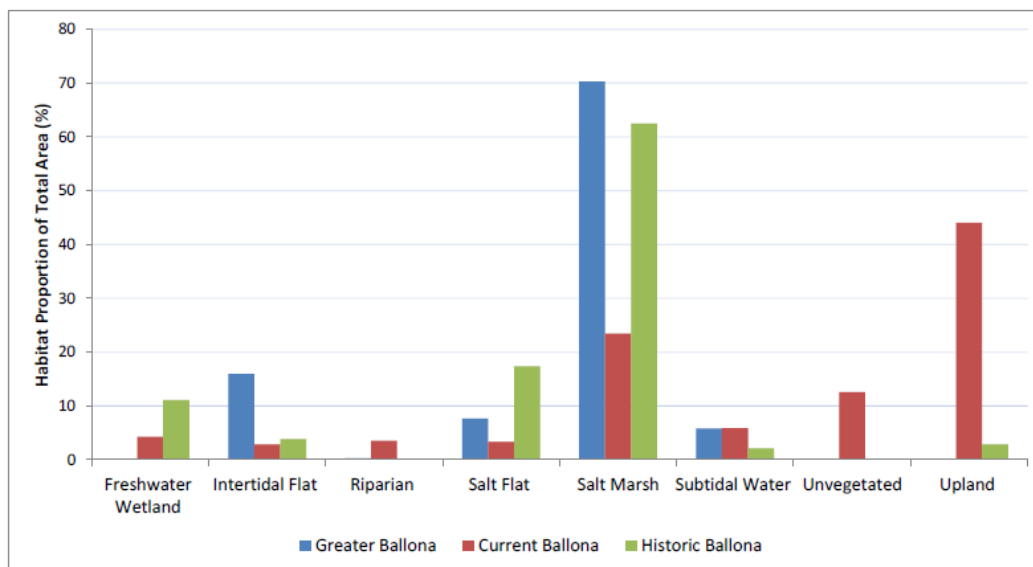


Figure 14. Habitat Proportions for the Greater Ballona Wetlands Complex (1762 acres), Current Ballona Creek Wetland area, and Historical Ballona Creek Wetlands (626 acres). Percentage of freshwater wetland, intertidal, riparian, salt flat, salt marsh, subtidal, unvegetated, and upland estimated from historical and current maps.

Proposed Modifications to Alternative 1

Heal the Bay supports Alternative 1 as the best option to achieve the ecological and public access goals set by the State. However, some modifications to Alternative 1 would help to ensure the goals are achieved. The proposed modifications to Alternative 1 could be accomplished through the permitting process for the project and should not require additional major analysis or recirculation of the DEIR/S. The following three changes, described in more detail below, would further ensure the final project meets the State’s goals:

- 1. Include additional criteria for the Belding’s Savannah Sparrow populations before Phase 2 is initiated.**
- 2. Add additional pedestrian and bike paths in Phase 1, and restrict public access to sensitive dune habitats in West Area B.**
- 3. Include in the Final DEIR/S a parking needs analysis, and reduce the parking lot footprints and add restroom facilities.**

- 1. Include additional criteria for the Belding’s Savannah Sparrow population before Phase 2 is initiated**



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We appreciate that Mitigation Measure BIO-1i-ii (page 3.4-101, Draft EIR/S) is included to protect the Belding's Savannah Sparrow. However, this mitigation measure needs to be strengthened to ensure the sparrows are adequately protected before Phase 2 of Alternative 1 is implemented. The requirement of one nesting pair of Belding's Savannah Sparrow in Area A prior to Phase 2 may be inadequate. Heal the Bay recommends a criterion of five nesting pairs because this is the lowest recorded number of Belding's nesting territories documented at the Ballona Wetlands from 1973 to 2016.¹⁶ The population has varied over the years; however, it appears that five breeding pairs are somewhat stable in that, five years later, the number of territories was 37. Further, as the Draft EIR/S suggests, low numbers of nesting pairs of Belding's indicate suitable habitat, and the number of nesting pairs would likely increase as temporary construction impacts cease and habitat matures. A well-justified requirement of more than one nesting pair of sparrows should be added to the numbered criteria listed on page 3.4-101 of the Draft EIR/S. This additional criterion will ensure that the state endangered Belding's Savannah Sparrow will be adequately protected in order to ensure its persistence and success at the Ballona Wetlands.

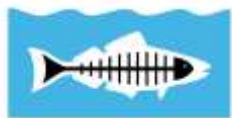
2. Add additional pedestrian and bike paths in Phase 1 and restrict public access to sensitive dune habitat

We support the public access plan for Alternative 1; however, the plan could provide even more access. We support the addition of a major pedestrian and bike path around East Area B, as seen in the Alternative 2 Public Access Plan. This will provide further linkages and recreational and educational opportunities, connecting the freshwater marsh and the wetlands south of Jefferson Blvd to the larger project. The existing pedestrian path through the dune habitat at the west end of West Area B should be restricted and not opened to the general public because general public access could negatively impact the fragile dune habitat that is home to the endangered El Segundo Blue Butterfly. However, additional pedestrian trails are needed elsewhere in West Area B. The existing trail to the viewing platform should be extended along the old trolley berm to connect with the proposed pedestrian trail that runs along Culver Blvd. as seen in Figure 2-18 of the DEIR/S (page 2-91).

3. Complete a parking needs analysis, reduce the parking lot footprints and add restroom facilities

Improved public access that is well-regulated is desperately needed at the Ballona Wetlands. Parking is a required element of a strong public access plan; parking lots should be appropriately sized, their impacts to local habitats should be minimized, and they should be located at major trailheads. The justification for the number and sizes of the parking lots in the Draft EIR/S needs to be strengthened. The Draft EIR/S does not discuss or analyze the expected number of visitors to a restored Ballona Wetlands and how many parking spaces or other amenities are needed. There should be a clear nexus between parking needs identified and the parking that is proposed. Alternatives 1, 2, and 3 present the same parking lot options:

¹⁶ Zembal et al. 2015. A survey of the Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) in California, 2015. State of California, Natural Resources Agency, Department of Fish and Wildlife, Wildlife Branch.



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three parking areas in Area A, including a three story lot with 302 spaces, and an improved parking lot in West Area B with 40 spaces. The Draft EIR/S states that the parking is for use by the public, LA County Department of Beaches and Harbors, and CDFW; however, parking for the public should be the top priority, with State and Local use minimized. The figures of the parking lots in Area A in the Draft EIR/S (Figures 2-2-20 and 2-21) are labeled as “Beaches and Harbor’s Parking Structure” and “Beaches and Harbor’s Parking Lot”. The Draft EIR/S should clarify why the parking structures are labeled as such and what this means. Who has jurisdiction over these parking lots and will uses be renegotiated to ensure compatibility with ecological goals? We do appreciate that the footprint of the parking lots in Area A have been reduced by 0.8 acres from the current lot; however, further reducing the footprint of the proposed lots should be explored, ideally to one lot in Area A. We are not opposed to a multi-story lot but we would like further justification for the size of this structure and impacts (if any) of the structure need to be identified and mitigated. We support the observation deck on the top of the structure, which will provide excellent educational opportunities.

Along with parking, appropriate restroom facilities need to be provided for visitors to the Wetlands. The Draft EIR/S does not present any plans for restrooms. It is not realistic to assume that people should rely on neighboring businesses for restroom facilities or in the worst-case scenario, that the wetlands themselves might be used as a bathroom. Restrooms need to be included in the restoration plans, ideally located at parking lots and major trailheads.

Comments and Questions by Section

Hydrology/Water Quality

Correct Beneficial Uses in Table 3.9-1

The beneficial uses that are listed in Table 3.9-1 (page 3.9-6) of the Draft EIR/S are not complete. The Los Angeles Regional Water Quality Control Board Basin Plan¹⁷ should be consulted to update the table. For instance, the Recreational Beneficial Uses for Ballona Creek, Estuary, and Wetlands are missing from the table in the Draft EIR/S.

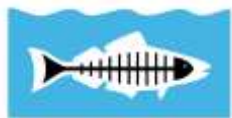
Add All 303(d) Listings

Table 3.9-3 in the Draft EIR/S for 303(d) pollutant assessments in the project area should also include impairments in the Wetlands for habitat alteration, hydromodification, reduced tidal flushing, exotic vegetation, and trash as indicated on the 2010 State Water Board’s 303(d) list.¹⁸

¹⁷ Los Angeles Regional Water Quality Control Board (LARWQCB). 1994. Water Quality Control Plan: Los Angeles Region. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura County. Available at:

https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.shtml

¹⁸ State Water Quality Control Board. 2010. 2010 Integrated Report (Clean Water Act Section 303(d) List/305(b) Report. Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml



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Update Table 3.9-4 and Include Further Discussion of TMDL Compliance Schedule

Table 3.9-4 in the Draft EIR/S shows a schedule for TMDL Implementation projects in relation to the construction schedules for the proposed Alternatives. The table shows TMDL compliance dates as written into TMDL implementation plans but not whether those compliance goals have actually been met. For instance, we know that dry weather compliance has not been achieved for the Bacteria TMDL, however, the schedule implies that this was achieved in 2013. Further, the Toxics and Metals TMDLs are shown as having achieved compliance of 75% reduction by January 2017 – has this actually been achieved or demonstrated? Evidence of TMDL compliance achievements should be added in as a separate column in the Table. The construction schedules are already out of date and need to be updated. There is an assumption that the TMDLs for bacteria, metals, and toxics will be met by 2021, which will correspond to completion of Phase 1 of Alternative 1 and Alternatives 2 and 3 (page 3.9-26, Draft EIR/S). While we realize that TMDL compliance is not within the scope of this project, nor within the lead agencies' jurisdiction, we recommend that a more thorough discussion be included on possible impacts if the TMDLs are not on track to being met in conjunction with restoration construction schedules. For instance, the trash waste load allocation of zero will be hard to achieve and we can assume that trash will be present to some degree in the Wetlands, despite best management practices. This does not mean that we should not restore the Wetlands and reconnect the Creek to its floodplains; the restoration aims to address numerous impairments and having some low levels of pollutants enter the Wetlands should not prevent action. In this case, a management plan for periodic cleanups could be developed and implemented to address potential impacts to habitat and wildlife from trash.

We recommend addressing more directly how upstream water quality improvement projects are compatible with the restoration goals for water quality and sediment loads. Provide more information about how the project design will handle changes, including in terms of the extent of monitoring that will occur. While we recognize that much of the Ballona Creek Watershed is beyond the scope of the restoration project, it is reasonably foreseeable that the timing, scope and overall approach of projects and planning efforts happening upstream to address environmental concerns, including the Ballona Creek Bacteria TMDL Project and Ballona Creek Enhanced Watershed Management Program, will affect water quality and sediment loading downstream. We strongly recommend a cumulative impacts and sensitivity discussion to disclose the impacts, both positive and negative, of upstream projects on the project site. The lead agencies (CDFW and ACOE) should work closely with the Los Angeles Regional Water Quality Control Board to stay updated on TMDL compliance progress and adaptively manage the project based on compliance dates.

Address Inconsistency with EPA TMDL More Thoroughly

While the Draft EIR/S addresses compliance with the EPA Ballona Wetlands TMDL, we are concerned that none of the alternatives of the Draft EIR/S will meet the TMDL sediment load allocations or the alternative load allocations for habitat acreage. For instance, the TMDL sets a number of 300,000 cubic yards of sediment to be removed from Area C; however, none of the proposed Alternatives remove any sediment from Area C, and in fact, add sediment from other Areas to Area C (Table 3.9-5, page 3.9-28, Draft EIR/S). The Draft EIR/S justifies this "...because



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the Project has been designed to achieve both sediment removal and restoration of historical tidal wetland habitats.”¹⁹ The alternate habitat acreage goals show that all Alternatives fall short on habitat acreage goals for intertidal and vegetated wetland habitat but have more subtidal and salt flat habitat than is required (Table 3.9-6, page 3.9-28, Draft EIR/S). The Draft EIR/S lead agencies should work with the Los Angeles Regional Board and EPA to ensure that the original goals of the TMDL are achieved. Further justification may be warranted for altering the original targets of the TMDL primarily due to increased understanding of climate change impacts. When the EPA TMDL was written, there was limited information available on localized climate change and sea level rise impacts. The Draft EIR/S appears to be better addressing future sea level rise than the EPA TMDL by creating and restoring more upland, as opposed to low-marsh, which will become inundated more quickly under sea level rise. However, we would like further clarification and justification on the amounts and types of habitat. Table 3.9-6 (page 3.9-28, Draft EIR/S) shows the TMDL load allocations for habitats compared to the habitat acreages by alternative. Alternative 1 has relatively more subtidal and salt pan habitat and less mudflat and low marsh and mid and high marsh than the TMDL load allocations; however, upland habitat is not included here and the total habitat acres are different. Please provide clarification on whether the differences in total acreage are due to upland habitat and why the load allocations are not being met. The goals of the EPA TMDL and Draft EIR/S are compatible and virtually the same; the lead agencies must ensure that regulatory requirements are being met or there is appropriate justification when they are not met.

Further information requested and recommendations for Hydrology section

- Please provide more discussion of channel morphology. How was the Creek meander determined in Area A? The channel in West Area B seems unnaturally straight – will this be contoured at all or allowed to change course on its own?
- Water salinity needs further discussion. A goal of the project is stated on page ES-9 of the Draft EIR/S as “a more natural salinity gradient” but this is not discussed in the Hydrology section. What are the expectations for salinity in different areas of the restoration? Can you set salinity goals based on tidal, freshwater, and groundwater influence? Expectations would help set clear criteria for success.
- As discussed in the Climate Change/Greenhouse Gas Section, we recommend including the most updated information and referencing updated studies concerning climate change and sea level rise. As new information continually emerges, we recommend that adaptive management be prioritized related to climate change and sea level rise issues.
- We recommend that adequate steps are taken to protect water quality during the restoration process from temporary impacts of construction (such as sediment inputs), that regular water quality monitoring is conducted, and that data are released to the public in a timely manner.
- Clarify the sediment load for Ballona Creek. Different numbers are given in the Draft EIR/S; on page 3.9-4, the sediment yield is given at 9,100 cy/yr and on page 3.9-13, the average sediment delivery is estimated to be 7,000 cy/yr.

¹⁹ Draft EIR/S page 3.9-28



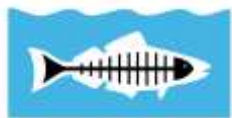
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- The discussion on excavation and grading impacts on water quality (page 3.9-43, Draft EIR/S) focuses on sediment quality only of newly deposited sediment. What about older sediment; why isn't that considered or discussed here? Further, there is the assumption that new sediment accretion or erosion won't be contaminated due to TMDL compliance but, as discussed above, this assumption needs to be addressed with further discussion.
- In the Alternative 1 Impacts and Mitigation Measures discussion, impacts are focused on West Area B (specifically, when addressing erosion and accretion). Why are Areas A and North B not addressed as well? For instance, it is stated that sediment from the Creek could degrade sediment quality in West Area B after storm events, but there is no mention of Area A or North Area B (Page 3.9-52, Draft EIR/S).
- The language on pages 3.9-52 and 3.9-55 of the Draft EIR/S are exactly the same. Is this correct? The language on page 3.9-52 does not directly relate to contaminated water and sediment from the watershed, unless it is only addressing historical contamination. Again, there is the assumption that TMDLs will be in compliance by the time of the restoration, an assumption which we would like further discussion on as addressed above.

Alternative 1 Monitoring Program

The monitoring program for Alternative 1 (pages 2-136 to 2-152, Draft EIR/S) is comprehensive and appropriately based on adaptive management principles. To further strengthen the monitoring program, we recommend the following changes:

- Specify how the different habitat types will be identified in order to know which performance criteria (Tables 2-12 to 2-20, Draft EIR/S) will be applied. For instance, will habitat be identified by elevation or through mapping of current and proposed habitats?
- Presumably, the 10-year monitoring program begins after Phase 2 of Alternative 1. However, monitoring clearly needs to be occurring after Phase 1 as well in order for Phase 2 to proceed. We would like to see this monitoring specifically identified and described in the monitoring program and performance criteria. Table 2-12 (page 2-139, Draft EIR/S) sets performance criteria for birds in tidal marsh habitat in years 8-10 as "successful breeding... for at least one (Belding's savannah sparrow) tidal marsh-associated bird species." This is confusing because it appears to be the same criteria for being able to proceed to Phase 2 but this is in the post-restoration monitoring plan. Please clarify how the two plans are related and whether we might expect breeding of Belding's savannah sparrow before 8-10 years.
- The performance criteria (Tables 2-12 to 2-20, Draft EIR/S) should specify that the goals are for native species except when they are explicitly about invasive or non-native species. For instance, Table 2-13 sets criteria for fish richness and abundance in criteria A for different monitoring years, but does not specifically state that the richness and abundance should be native species. We think this is an important distinction and should be added to all criteria in Tables 2-12 to 2-20 that don't explicitly name species as native.



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Biological Resources

Heal the Bay supports Alternative 1 with the additional safeguards for the Belding's Savannah Sparrow as described above. Removing concrete levees will enhance fish foraging, spawning, and nursery habitat and, along with Malibu Lagoon and Topanga Lagoon, provide one of only three relatively healthy estuary habitats for fish reproduction and feeding in the entire Santa Monica Bay. Additional questions and comments related to Biological Resources are detailed below.

Further information requested and recommendations for Biological Resources section

- Strengthen requirements (page ES-20, Draft EIR/S) to protect and relocate animals during construction. Similar to what occurred during the Malibu Lagoon restoration, biological monitors should be on site and at every piece of equipment to survey, trap, and move any wildlife that may be impacted by restoration activities.
- Ensure that sensitive plants are surveyed and relocated via plant or seed, particularly in Area C.
- Ensure that restoration plantings are from local genetic stocks when possible.
- In order to protect the willows in Southeast Area B, we recommend that the channel be moved away from the willows to prevent salt water intrusion and impacts to the willows. We are concerned that relying on a future mitigation plan if impacts are seen will be inadequate since it will be hard to reverse the impacts of salt water and tidal flow once they have begun.

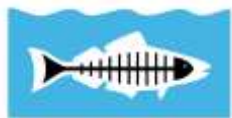
Greenhouse Gas Emissions/ Climate Change

Alternative 1 provides the greatest local resilience to climate change. Wetland restoration is widely accepted as a tool for carbon sequestration as well as a management technique for sea level rise. Additional questions and comments related to Climate Change are detailed below.

Further information requested and recommendations for Climate Change/GHG Emissions section

- This section references University of California, Los Angeles (UCLA) and Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC) studies published in 2012. We recommend utilizing regional LA climate change prediction updates that are more current, like the University of Southern California Sea Grant LA Region study released in early 2017 based on the newest data and coastal storm modeling system (CoSMoS), available at: <http://dornsife.usc.edu/uscseagrant/adaptla/>.
- The summary of relevant policies focuses on emissions related law in California. We recommend also including natural resources policies that support wetlands as a climate mitigation strategy (e.g. California Coastal Commission Sea Level Rise Policy Guidance²⁰,

²⁰ California Coastal Commission. 2015. Sea Level Rise Policy: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits. Available at: https://documents.coastal.ca.gov/assets/slr/guidance/August2015/0_Full_Adopted_Sea_Level_Rise_Policy_Guidance.pdf



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California Natural Resources Agency Safeguarding California Plan: California's Climate Adaptation Strategy²¹).

- We recommend referencing the City of LA Sustainability Plan²², which has updated goals relative to what is referenced in the Draft EIR/S for the City of LA. The goals in the City of LA plan are for GHG reduction of 60% by 2035, and 80% by 2050 (below 1990 baseline).
- The Draft EIR/S calculates GHG emissions for each alternative, none of which are significant. However, it doesn't account for carbon sequestration generally or specifically, which is an important benefit of wetlands restoration and helps to differentiate among the alternatives.

Recreation/Access Comments

Heal the Bay strongly believes that this restoration project needs to provide access to critical open space with an emphasis on being welcoming to all Angelenos from across the whole region as well as visitors to the region. Accessibility includes parking, alternative transportation options, bathrooms, and educational opportunities. Every effort should be made to ensure that these types of access are in harmony with the Wetlands and their ecological health. Parking and bathrooms have been discussed above as well as additional bike and pedestrian paths. With those changes, we support the Access Plan for Alternative 1. Additional comments related to access are detailed below.

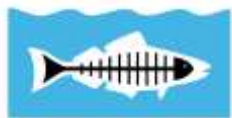
Further information requested and recommendations for Recreation/Access section

- Section 3.11.2.2, Environmental Setting, of the Draft EIR/S does not include the nearby Ballona Discovery Park. This park should be added to the table and description of nearby parks and recreational opportunities.
- Section 3.11.3.3 of the Draft EIR/S on Local Laws, Regulations, Plans, and Standards should refer to and address the recently completed LA County Parks needs assessment.²³ In March 2015, the Los Angeles County Board of Supervisors approved a motion to initiate the Countywide Comprehensive Parks and Recreation Needs Assessment. This represents an unprecedented effort to document existing parks and recreation facilities in cities and unincorporated communities in Los Angeles County, and to use these data to determine the scope, scale, and location of park need in the County. The inventory and analysis of parks and open space that was completed during the course of the Parks Needs Assessment

²¹ California Natural Resources Agency. 2018. Safeguarding California Plan: 2018 Update. California's Climate Adaptation Strategy. Available at: <http://resources.ca.gov/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf>

²² City of Los Angeles. 2017. Sustainable City pLAN: 2nd Annual Report 2016-2017. Available at: <http://plan.lamayor.org/>

²³ LA County Department of Parks & Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment. Available at: www.lacountyparkneeds.org



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generated many maps and new datasets, which should be incorporated into the Ballona Wetlands restoration project.

- Section 3.11.3.3 of the Draft EIR/S should also refer to the City of Los Angeles Sustainability Plan.²⁴ This plan set a goal of 65% of Angelenos living within ½ mile of a park by 2025. The Ballona Restoration project could help achieve that goal and should be discussed.
- We recommend that the restoration project engage community members in restoration activities when possible. Promoting local community involvement will build stewardship and provide educational opportunities.

As expressed above, we urge CDFW and the ACOE to:

- Select Alternative 1 to best meet the ecological and public access goals; Alternatives 3 and 4 do not meet the goals and will result in further ecological degradation and limited public access.
- Modify Alternative 1 in the Final EIR/S to include a parking needs analysis, parking lot(s) with reduced footprints, restrooms, additional access paths, and an additional safeguard for the Belding's savannah sparrow.
- Consider our other specific comments as well as the amendments recommended by the Wetlands Principles Coalition Steering Committee as detailed in our joint letter.

Heal the Bay is thrilled that the restoration process for the Ballona Wetlands is underway with the public release of the Draft EIR/S and we anxiously await implementation of a robust restoration project. Alternative 1 will best achieve an ecosystem that is functioning, healthy, and resilient to climate change by reconnecting the Creek to its floodplain, removing legacy sediment, establishing tidal wetland habitat, and opening the Wetlands to well-regulated public access for all. Doing nothing is not an option; the Wetlands are degraded and will only continue to worsen without action. We must act now, guided by the best science, to restore this open space gem so that generations of plants, animals, and people can rely on it and enjoy it.

Thank you for your consideration of these comments. Please feel free to contact us at (310) 451-1500 with any questions.

Sincerely,

Katherine Pease, Ph.D.
Watershed Scientist

Shelley Luce, D.Env.
President & CEO

²⁴ City of Los Angeles. 2017. Sustainable City pLAN: 2nd Annual Report 2016-2017. Available at: <http://plan.lamayor.org/>