



The City of San Diego

REPORT TO THE RESILIENCY ADVISORY BOARD

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HEARING DATE: April 17, 2025

SUBJECT: Coastal Resilience Master Plan and Programmatic Environmental Impact Report

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LOCATION: Citywide

DESCRIPTION: Review and consider for the purpose of making a recommendation to the City Council the final draft of the Coastal Resilience Master Plan; the creation of Capital Improvement Projects for the Mission Beach – Dunes, Ocean Beach – Dog Beach, Ocean Beach - Pier, and Sunset Cliffs sites; and certification of the Coastal Resilience Master Plan Programmatic Environmental Impact Report

STAFF RECOMMENDATION:

Staff recommends that the Resiliency Advisory Board recommend to the City Council:

ADOPTION of the Coastal Resilience Master Plan;

CREATION OF CAPITAL IMPROVEMENT PROJECTS for the Mission Beach – Dunes, Ocean Beach – Dog Beach, Ocean Beach - Pier, and Sunset Cliffs sites; and

CERTIFICATION of the Programmatic Environmental Impact Report.

OVERVIEW:

The Coastal Resilience Master Plan is an implementation action of Climate Resilient SD, the City of San Diego's climate adaptation and resilience plan, aimed at addressing the growing risk of coastal flooding and erosion. With sea levels in the region projected to rise significantly this century, the City of San Diego (City) is prioritizing a nature-based solution approach, where feasible, to mitigate risks,

protect vital ecosystems and enhance community resilience. The Coastal Resilience Master Plan is informed by the City's Sea Level Rise Vulnerability Assessment, as well as the latest science and state guidance.

Sea level rise could have severe impacts on both infrastructure and natural habitats, with projections indicating that by 2100, coastal flooding may occur almost daily. The City recognizes the need for urgent action to protect its critical coastal assets, including open space, conservation areas, beaches, and infrastructure. The Coastal Resilience Master Plan develops concept level design of nature-based solutions to protect these resources and provide additional co-benefits like enhanced habitat, continued recreational opportunities, and increased coastal access.

Key components of the Coastal Resilience Master Plan include the identification of six priority sites for pilot projects: La Jolla Shores, Pacific Beach - Tourmaline Surf Park, Mission Beach, Ocean Beach - Dog Beach, Ocean Beach - Beachfront, and Sunset Cliffs. These locations were selected based on feasibility, resilience needs, and potential environmental benefits. Proposed projects at these sites range from constructing elevated sand dunes, restored coastal habitats to realigned parks and infrastructure.

To advance these projects, the City has secured over \$1.3 million in National Fish and Wildfire Foundation and State Coastal Conservancy grant funding, which will support completion of the plan, concept level designs for six sites, environmental analysis, technical studies, community engagement, Tribal coordination and partnership, and initial engineering design for up to 4 sites. Based on need, feasibility, and community input, staff recommends selecting Ocean Beach - Dog Beach, Ocean Beach - Beachfront, Sunset Cliffs, and Mission Beach in the Capital Improvement Program to continue forward to initial engineering.

The Coastal Resilience Master Plan is an essential part of the City's ongoing efforts to adapt to climate change, preserve biodiversity, protect vulnerable communities, and safeguard its economy.

DISCUSSION OF ITEM:

Background

Sea level in San Diego is expected to rise five to fourteen times faster over the course of this century than it did in the previous century, leading to risks of increased flooding and coastal erosion. The latest sea level rise guidance from the Ocean Protection Council identifies 0.8 feet of sea level rise by 2050 as the most likely to occur, with a range of 3.1-6.6 feet of sea level rise by 2100 (La Jolla tide gauge). In context, for the time period of 1990-2024, San Diego typically experiences 1-3 minor flood days per year. Projected out to 2025, using the 0.8 feet of sea level rise, this could be anywhere from 20-40 days of high tide flooding. Looking further out to the end of the century, high tide flooding is anticipated to occur almost daily (NOAA Sea Level Calculator, La Jolla Tide Gauge).

Sea level rise and associated coastal flooding and erosion will undoubtedly impact coastal resources, communities and City assets without strategic implementation of adaptation strategies. By 2050, sea level rise, accompanied by storm surge, could place \$208 to \$370 million worth of assets at risk

(State Lands Sea Level Rise Vulnerability Assessment, City of San Diego, 2019). By 2100, sea level rise alone may expose approximately \$259 to \$614 million worth of assets to coastal flooding.

More broadly, San Diego's coast also represents a critical economic sector for the region, fueling tourism and recreation industries. Under a high sea level rise projection (6.6 ft) and accompanied by a storm event, over 2,600 establishments inclusive of 49,000 jobs, \$8 billion in sales, and \$6.1 billion in contribution to the regional gross domestic product would be at risk of flooding across San Diego County (Regional Economic Vulnerability to Sea Level Rise in San Diego County, Center for the Blue Economy at Middlebury Institute, 2018).

In addition to City infrastructure and the economy, open space and conservation areas are also highly vulnerable to both sea level rise and coastal storm events (Citywide Climate Change Vulnerability Assessment, City of San Diego, 2020). These assets are particularly sensitive to coastal flooding exposure as sea level rise can drive changes to the ecosystem including change in nutrient availability, sediment and salinity that may cause certain habitats to disappear, especially if there is not potential for the habitat to migrate inland or upland. Chronic flooding of coastal conservation areas can also threaten the viability of sensitive, threatened and endangered species that depend upon that habitat. Unsurprisingly, beaches were also identified as highly vulnerable to sea level rise. Storm events can be highly erosive and result in large amount of beach sand being washed away. Sea level rise may cause beaches to shrink, particularly if there is not space for them to move landward.

While these numbers are stark, they represent risk and impact without action. The City has long recognized the need to be a leader on climate, both through setting ambitious climate mitigation goals and by planning for climate change driven hazards to ensure that our communities and our city operations are prepared for, able to respond to, and able to thrive in a changing climate.

In 2020, the City completed a Climate Change Hazard Vulnerability Assessment that considered the impacts of wildfire, extreme heat, flooding and sea level rise on assets and resources. This vulnerability assessment, along with community voices, helped to inform the Climate Resilient SD plan which includes a suite of adaptation strategies to mitigate hazard risk and build community resilience. In December 2021, the City Council adopted the Climate Resilient SD plan; the plan provides a framework for action to ensure critical city services are maintained, build a resilient and equitable future, support thriving natural environments, protect historical and Tribal cultural resources, and provide our communities with the information and resources they need to be prepared.

Within Climate Resilient SD, Policy TNE-3, calls for prioritizing the implementation of nature-based climate change solutions wherever feasible. The Coastal Resilience Master Plan is a strategy under this policy that calls for identifying locations for implementation of nature-based solutions to mitigate coastal flooding and erosion, improve coastal resiliency, protect habitat and increase recreational opportunities for residents and visitors.

Plan Purpose and Objectives:

The Coastal Resilience Master Plan implements Climate Resilient SD, the City's climate adaptation and resilience plan, to inform the development of nature-based coastal resilience projects that allow the City to adapt to the impacts of sea level rise while enhancing and protecting the biological diversity of the City's coastline. The coast provides habitat for populations of endangered, threatened and key sensitive species protected by the City's Multiple Species Conservation Program Subarea Plan, such as the Light-footed clapper rail, Western snowy plover and California least tern. Additionally, many of the City's critical assets, including open space, habitat, and community resources are identified as vulnerable to sea level rise.

The Coastal Resilience Master Plan aims to prepare the City to adapt to sea level rise through the implementation of nature-based solutions where feasible. The main objectives are as follows:

- a) Prioritize the implementation of nature-based climate change solutions wherever feasible, consistent with Climate Resilient SD Policy TNE-3.
- b) Address the effects of sea level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions.
- c) Protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change.
- d) Protect and enhance recreational opportunities.
- e) Protect historical, archaeological and tribal cultural resources and incorporate Indigenous Knowledge into resilience efforts and adaptation strategies.
- f) Increase coastal access for all community members, with prioritization of Communities of Concern.

Nature-based Solution Pilot Projects

The Coastal Resilience Master Plan looks beyond more traditional coastal engineering techniques, such as seawalls, and includes nature-based solution pilot projects for prioritized sites along the City's coastline. The prioritization of nature-based solutions for coastal resilience provides additional resilience, environmental and socio-economic benefits such as enhanced or protected habitat, coastal access, green jobs and environmental education opportunities. The projects identified in the Coastal Resilience Master Plan will mitigate risk from sea level rise and provide benefits to communities, such as habitat protection, water quality improvements, flood storage and recreation opportunities. The projects also consider ways to enhance access to the beach for all community members, such as expanded public transportation to the beach, improved pedestrian and bicycle infrastructure and efficiency enhancements for parking.

Sites were investigated through a multi-criteria analysis that considered community, resilience, economic, and ecosystem benefits. The multi-criteria analysis helped to identify the locations most viable for a nature-based concept, narrowing from an initial eleven sites down to six. The eleven sites initially considered include: Torrey Pines State Beach – Los Peñasquitos Lagoon, Black's Beach, La Jolla Shores, Marine Street Beach, Windansea Beach, Pacific Beach – Tourmaline Surf Park,

Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, Sunset Cliffs, and the Naval Training Center Park. The six sites prioritized for inclusion in the Coastal Resilience Master Plan are La Jolla Shores, Tourmaline Beach, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Beachfront, and Sunset Cliffs.

Short descriptions of the six proposed project concepts are provided below. Project concepts were iteratively vetted with City departments, the Stakeholder Advisory Committee and community members. Internal City coordination including an interdepartmental working group comprised of the City Planning, Parks and Recreation, Transportation, Stormwater, Engineering and Capital Projects, and Fire departments. This working group met regularly throughout plan development to inform project design related to City operations and maintenance. The City invited 22 stakeholder agencies to participate in a Stakeholder Advisory Committee (Committee) comprised of local, state, and federal agencies, research institutions, and coastal or environmental focused organizations. The Committee was formed to support the project and provide technical input on feasibility, benefits and prioritization of proposed nature-based solutions, as well as coordination efforts. Community members were engaged throughout plan development, see “Key Stakeholders and Community Outreach Efforts” section below for more detail. Some project sites have alternative concepts that provide options to address site-specific issues and nature-based solutions.

La Jolla Shores:

The Amphitheatre Design concept maintains the existing alignment for La Jolla Shores and includes two different flood protection strategies across the site. Along the seaward (western) borders of La Jolla Shores Park and Kellogg Park, an elevated linear earthen dike would be constructed between the grassy area and the La Vereda pedestrian path. Along the seaward border of the parking lot (between the parking lot and the La Vereda pedestrian path), a terraced seawall would be constructed to provide a viewing and seating area while also providing flood protection benefits.

The Reconfigured Park concept would realign the parking lot and grassy recreational areas essentially swapping the seaward edge of the parking lot for a more inland alignment where the parking lot would be reoriented more linearly along Camino del Oro. A grassy recreational area would be added along the entire western edge of the site (formerly parking lot) creating a large linear and continuous grassy park.

Tourmaline Surf Park:

The project concept Tourmaline Surf Park would convert the existing shoreline protection feature into a hybrid nature-based solution. The existing rip rap would be buried to provide a core layer and topped with a mix of cobble and sand. The proposed sand and cobble dune would be vegetated with native plantings to provide ecological benefits through introduction of rare plant species and potential habitat for various avian species. Additional seating and enhanced viewing areas would be integrated into the top of the vegetated dune, increasing the usability and aesthetics of the site. One optional component includes covering or undergrounding the existing drainage culvert along the north edge of the project site to create additional green space and a pedestrian pathway. Additional optional

component would focus on stormwater improvements to include an underground vault beneath the parking lot to capture runoff and provide water quality treatment.

Mission Beach:

The Sand Dune concept for Mission Beach would construct an elevated sand dune seaward (west) of the seawall and Ocean Front Walk. The proposed sand dunes would be vegetated with native plantings to provide ecological benefits. The proposed sand dunes would be a permanent fixture at the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea level rise.

The Perched Beach concept for Mission Beach considers swapping out a portion of grass recreational space at Mission Beach Park for a perched sand beach. A perched beach is an elevated beach area that would provide increased usable beach space during higher water levels and offers a reservoir of sand for the adjacent beach area. This would be achieved by realigning the seawall and Ocean Front Walk inland. This concept could be implemented in conjunction with a dune feature stretching north along the project site.

Ocean Beach – Dog Beach:

The Ocean Beach – Dog Beach Dunes proposed project includes dune habitat restoration at the eastern edge of the project site near Smiley Lagoon as well as a new multi-use path for cyclists and pedestrians fronted by elevated sand dunes that run along the beach. The proposed sand dunes would be vegetated with native plantings to provide ecological benefits.

The Ocean Beach – Dog Beach Resilient Relocation project maintains the same features as the Dunes concept but relocates the existing restroom facility further inland to reduce vulnerability and continued exposure to coastal flooding. This concept also includes an express shuttle that runs from an appropriate transportation center. One of the objectives of the Coastal Resilience Master Plan is to increase coastal access, particularly for Communities of Concern. Many Communities of Concern are more inland with reduced access to the coast by public transit. For example, a typical public transit trip from City Heights to Ocean Beach can take upwards of two hours. The Ocean Beach – Dog Beach proposed project concept looks to add an express shuttle or other micro transit solutions to the project site to support easier access from a nearby transit station. Access to the coast should be available to all San Diegans but is particularly important when considering climate change impacts more broadly. Exacerbated heat waves will be hotter and persist for longer with disproportionate impacts to Communities of Concern. The coast can provide refuge during heat waves, but only if accessible.

Ocean Beach – Beachfront:

Similar to Ocean Beach – Dog Beach, the concept for Ocean Beach – Beachfront would construct a multi-use path for cyclists and pedestrians fronted by a sand dune. The proposed sand dunes would be vegetated with native plantings to provide ecological benefits. The dunes and path would be located along the landward edge of the beach and would connect to the proposed improvements at

the Ocean Beach - Dog Beach project site. As such, the multi-use path would connect the existing western terminus of the San Diego River Trail to the Ocean Beach Pier.

Sunset Cliffs:

Given the narrow cliff edges and limited amount of recreational space consisting of informal trails, the major focus for the Sunset Cliffs project is to enhance the existing resources without compromising the structural integrity of the cliff or current infrastructure. The Sunset Cliffs project site runs from Adair Street to Ladera Street in the south. For the northern portion of the project site, the proposed concept looks to realign the parking lots away from the cliff edge. This option includes trail enhancements, revegetation of the linear park with native vegetation, drainage improvements as necessary and removal of the paved parking lots from the cliff to pull-in parking spaces along the roadway. The southern section of the project site considers a road reconfiguration on Sunset Cliffs Boulevard which would create a new separated multi-use path for pedestrians and with a one-lane, one-way southbound vehicular travel lane.

Implementation

The first phase of the Coastal Resilience Master Plan was funded through a National Fish and Wildlife Foundation grant and included completion of high-level concept designs, community and stakeholder engagement and development of a Programmatic Environmental Impact Report. To continue this work, the City has secured over \$1 million in grant funding through a State Coastal Conservancy grant. This grant supported completion of the draft Coastal Resilience Master Plan and includes funding for the next phase of project work, including continued community engagement, Tribal coordination and partnership, additional environmental analysis, technical studies and moving three project sites forward to initial engineering (15% design).

The technical studies will include the following:

- A) Coastal engineering analysis: The report will provide an evaluation of physical design parameters (such as total water levels in addition to projected sea level rise and fluvial and coastal hydrological conditions), at each of the sites in order to properly refine proposed project elements such as: setbacks, height and width of design features, and proper sizing of materials (e.g., rock or cobble) for stability.
- B) Materials sourcing study: Depending on project type, this study would provide an evaluation of where adequate materials could be derived to construct the proposed project. This information is important to provide accurate opinions of probable construction costs.
- C) Ecological basis of design: Nature-based concepts (such as dunes, ecotone slopes or oyster reefs) may require an evaluation of the existing and historical ecological setting of the site (or nearby analog sites) in order to include appropriate biological features and supporting physical characteristics into the design. This study includes preparing an ecological basis of design for sites and concepts that include restoration or enhancement of biological features.

Completion of the scoped work under this grant positions the City to be highly competitive for and take advantage of grant funding available for implementation projects. In November 2024, California voters approved a \$10 billion climate bond (Proposition 4) that supports a range of climate related initiatives including wildfire preparedness, safe drinking water, flood resilience and clean energy. The bond includes \$1,200 million for coastal resilience, \$173 million of which is anticipated for the 2025-2026 budget and \$129 million of which is anticipated for the 2026-2027 budget. Additionally, through the SB1 grant program, the Ocean Protection Council has \$36.8 million in implementation funds available to support project implementation, with prioritization for nature-based and green-gray hybrid adaptation projects, feasibility studies, and design plans. These funding sources are more and more prioritizing implementation, focusing on moving past the planning process and getting projects built that will bring solutions to communities. For the City to be able to leverage these available implementation funds, the projects need to be positioned to be ready for engineering design and construction.

The projects within the Coastal Resilience Master Plan are unique from other on-going coastal planning efforts, such as the Mission Bay 10 Year Improvement Plan, in that they are nature-based solutions focused, but with a green-gray hybrid approach, while many projects within the Mission Bay 10 Year Improvement Plan are distinct in being wetland and habitat restoration focused (North Fiesta Island, Tecolote Creek, Cudahy Creek) or mobility or asset improvements. This distinction will allow the City to strategically apply for varied funding sources to move all priority projects forward.

Recommended Projects for Capital Improvement Program:

Based on the analysis of feasibility, risk, and benefits of the nature-based and gray infrastructure solutions on each project site, the CRMP Phase 1 developed one location at the 15 percent design level. Given the high score in the City's site selection process, the Ocean Beach – Dog Beach project site was selected for the initial pilot project.

Through the State Coastal Conservancy Grant, there is funding to move three additional sites forward to 15 percent design. To complete the engineering and accompanying technical studies, the projects need to be initiated into the Capital Improvement Program. It is staff's recommendation to establish a CIP for the following sites:

- 1) Ocean Beach – Dog Beach and Ocean Beach – Beachfront: Consistency in project design enabled the 15 percent design to be carried forward from the pilot project site (Ocean Beach – Dog Beach) through the Ocean Beach – Beachfront project site. These project sites were the top ranking in the multi-criteria analysis. Both project sites face significant risk of sea level rise driven flooding by end of century or sooner. The Ocean Beach – Dog Beach site is the only project site with designated habitat restoration and provides the opportunity to expand recently completed restoration work by the estuary. The Ocean Beach – Dog Beach site also provides a unique opportunity to enhance coastal access by means of public transit through proposed express shuttle. By bringing these two projects forward together, there is the opportunity to more comprehensively plan for the Ocean Beach coastline, provide

coastal protection from flooding, enhance habitat, and improve access to the coast through multimodal improvements.

- 2) Sunset Cliffs: The Sunset Cliffs project site sits along an eroding cliff edge that faces public safety concerns. Current conditions do not provide a safe user experience for pedestrians and bicyclists, with the former frequently being merged into the roadway due to lack of separated pedestrian paths. This stretch of roadway has experienced accelerated erosion that has required emergency repairs within the last year by the City to maintain safe conditions for users. The proposed project concept for this site enables the City to improve public safety while creating time and space for longer term planning.
- 3) Mission Beach: The Mission Beach project site is vulnerable to sea level rise driven flooding, particularly during storm events. Both project concepts would provide enhanced protection to flooding and support continued use of the beach by providing a reservoir of sand and/or elevated beach area. Cost considerations along with community preference should inform selection of the project concept to move forward. The Mission Beach project site is considered within the SANDAG Regional Beach Nourishment Project. As the project moves forward, coordination with SANDAG should consider use of sand for project concept in addition to or in place of beach nourishment.

Project sites not recommended at this time:

- 1) Tourmaline Beach: Comparatively to the other project sites, sea level rise impacts at the site do not expose as many assets or have the same urgency with regards to public safety. As additional funding and resources are available, this project concept is recommended to move forward.
- 2) La Jolla Shores: Throughout community engagement, differing perspectives and priorities for the project site were raised by community members and stakeholders. Additional community and stakeholder engagement should precede the project concept moving forward to initial engineering.

City Strategic Plan Goal(s)/Objective(s):

Goal # 2: Work in partnership with all of our communities to achieve safe and livable neighborhoods.

Objective # 3: Invest in quality infrastructure.

Goal # 3: Create and sustain a resilient and economically prosperous City with opportunity in every community.

Objective # 1: Create dynamic neighborhoods that incorporate mobility, connectivity, and sustainability.

Objective # 4: Prepare and respond to climate change.

Fiscal Considerations:

There are no expenditures being authorized with this action.

Charter Section 225 Disclosure of Business Interests:

N/A; there is no contract associated with this action.

Environmental Impact:

The City of San Diego has prepared a [draft Program Environmental Impact Report \(PEIR\) \(SCH No. 2023050148\) for the proposed Coastal Resilience Master Plan](#). In accordance with CEQA, the draft PEIR was made available for a 45-day public review period from November 22, 2024 to January 5, 2025. Staff is currently working to prepare the final PEIR, which will include responses to public comments on the PEIR which were received during the public review period. The final PEIR will be available prior to the City Council hearing.

Climate Action Plan Implementation:

The Coastal Resilience Master Plan implements a strategy within the Climate Resilient SD plan. The Climate Resilient SD plan is consistent and aligned with the Strategy 5 of the Climate Action Plan, Resilient Infrastructure and Healthy Ecosystems

Equal Opportunity Contracting Information (if applicable):

N/A

Previous Council and/or Committee Actions:

City Council passed Resolution R-314024 on April 14, 2022 to authorize the grant agreement with the National Fish and Wildlife Foundation to accept, appropriate, and expend in amount not to exceed \$250,000 of the National Coastal Resilience Fund.

City Council passed Resolution R-315308 on January 16, 2024 to authorize the acceptance, appropriation, and expenditure of \$1,072,000 State Coastal Conservancy Grant funds for the Coastal Resilience Master Plan.

Key Stakeholders and Community Outreach Efforts:

Community engagement is a key component of developing the Coastal Resilience Master Plan as it ensures that community voices, values and concerns are heard and incorporated as we collectively plan for the future of our coastline. The coast is an asset to all San Diegans, by actively involving community members, stakeholders and community organizations, the plan benefits from diverse perspectives and local knowledge, leading to more robust resilience strategies and a shared vision of our coastline. More information on the approach and planned activities for community and stakeholder engagement can be found in Appendix B: Public Engagement Plan.

Stakeholder Advisory Committee:

For Phase 1 of the Coastal Resilience Master Plan, three Committee meetings were held at key project milestone including: site selection, initial draft concept designs, and draft concept designs and pilot project selection. The Committee will continue to be engaged in future phases of the Coastal

Resilience Master Plan to provide technical input on feasibility, design, and implementation of nature-based solutions.

Pop-Ups:

The City held eight pop-up events from winter and spring of 2024. Pop-ups were held at each project site as well as other central locations across the City, such as the Valencia Park/Malcom X Branch Library and Earth Fest in Balboa Park. At each pop-up event, the City engaged with community members by presenting an overview of the Coastal Resilience Master Plan project goals and draft design concept(s) for each site. Community members were invited to share feedback on the draft concepts and ask questions about the project. Informational flyers that included an overview of the project, proposed project sites, and a link to the Coastal Resilience Master Plan webpage to stay up to date on the planning efforts and upcoming community engagement opportunities was also shared with community members. The City continues to regularly attend community events to share about the planning effort, including a Family Day at the Central Library in November 2024, December Nights in December 2024 and Love Your Wetlands Day in February 2025.

Online Survey

In April 2024, the City launched an online survey seeking feedback from the public on each of the draft project designs for each of the sites within the Coastal Resilience Master Plan. The online survey provided an overview of the sea level rise challenges facing each site and the key features of the proposed project design. The survey sought feedback from the community to inform project design, improve recreation opportunities and support coastal access. The online survey was live through the end of June 2024 and received 789 responses.

Community Workshops:

In June 2024, the project team held two community workshops. The community workshops provided an opportunity for the project team and community stakeholders to dive deeper into the proposed features for each of the six sites, explore the range of nature-based solutions that are available for each site, and provide meaningful insights into the recreation and access opportunities and challenges of each site. At each workshop, the project team presented an overview of the Coastal Resilience Master Plan project purpose, planning process, and sought feedback from the community on the draft project designs for each of the sites. Feedback received from the community helped to inform project design.

Community Webinar:

Following public release of the draft Coastal Resilience Master Plan, an online community webinar was held. The webinar discussed the planning process for the Coastal Resilience Master Plan, provided an overview of the proposed concept designs and outlined the next steps in the planning process. Interactive breakout groups for each project site were held.

Tribal Engagement:

Throughout plan development, the City has reached out to Tribal Nations and organizations to create space within the planning process for Tribal consultation as well as coordination regarding how the project may affect Tribal interests. The City aims to provide meaningful opportunities to Tribes to participate in planning process, incorporate and acknowledge Indigenous Knowledge into Coastal Resilience Master Plan projects and acknowledge Tribal Cultural Resources in/near project area. As the project moves forward, City staff will continue to engage with Tribal Nations and Tribal organizations to build partnerships and meaningfully engage in planning for the future of San Diego's coast.

Community Feedback:

The following are key themes of community feedback received through the online survey, pop-ups, community workshops and community webinar, along with how community priorities have been incorporated into the draft plan.

- **Maintenance:** Community members cited the need more ongoing maintenance of existing and future facilities.
 - Feedback has been shared with asset managing City departments who completed ongoing maintenance. Upgrades to existing facilities, such as lifeguard stations, will be included in the project design as feasible.
- **Safety:** Community members desired greater safety, particularly for pedestrians and for beach users and community members during both daytime and nighttime.
 - Pedestrian safety measures were a primary concern for community members for the Sunset Cliffs project site. A separated pedestrian pathway along the entirety of the project footprint will greatly enhance pedestrian safety. Additional safety features are identified for further consideration as the project design is refined, including but not limited to high visibility crosswalks, speed bumps and roundabouts. Nighttime safety concerns will be addressed through continued coordination with Fire-Rescue and Police Department staff to ensure that City lifeguards and police are able to conduct all necessary duties.
- **Parking:** Access to parking was a top priority from community members for all sites.
 - For all project sites, no changes to the total amount of available parking are proposed. Project design to support efficiency of traffic flow is suggested for the La Jolla Shores, Pacific Beach - Tourmaline Surf Park, and Sunset Cliffs project concepts.
- **Access:** Enhanced access to the coast, including multimodal, emergency and ADA, were priorities for community members.
 - The Coastal Resilience Master Plan aims to make the coast more accessible to all San Diegans. Multimodal improvements, including an express shuttle stop and multi-use path for the Ocean Beach project sites and separated bicycle and pedestrian paths for the Sunset Cliffs project site were included. All existing emergency and ADA access points will be maintained. The Pacific Beach – Tourmaline Surf Park includes further consideration for additional ADA compliant pedestrian walkways to the beach.

- **Recreation opportunities:** Community members value a range of recreation uses along the coast including: walking, biking, surfing, swimming, volleyball, and bringing their dog to the beach. The community expressed strong interest in these opportunities being maintained.
 - Maintaining recreation opportunities along the coast is a primary objective of the Coastal Resilience Master Plan. For La Jolla Shores, the project design aims to maintain the same recreational park space that is currently available while providing protective features. For Pacific Beach – Tourmaline Surf Park, the project design aims to maintain a popular surf spot through protective dunes that will both minimize erosion and provide a reservoir of sand and also includes enhanced user amenities. The Mission Beach projects both protect and maintain the strand, a popular walking and biking path along the coast while the dunes provide a reservoir of sand to help maintain the beach. The Perched Beach concept provides additional beach recreation space. These projects do not propose changes to nearby volleyball courts. The Ocean Beach – Dog Beach and Ocean Beach – Beachfront project concepts provide additional walking and biking opportunities through the addition of a multi-use path. The Ocean Beach – Dog Beach project concept does impact five existing volleyball courts due to their current location being located where the proposed dune would be sited. Additional community engagement is needed as the project concept moves forward to discuss alternative locations and trade-offs for relocation of the volleyball courts. The proposed dunes for the Ocean Beach – Dog Beach and Ocean Beach – Beachfront projects provide a reservoir of sand to help maintain the beach. The Sunset Cliffs project design supports walking, biking, and viewing opportunities along the coast through trail enhancements, a separated pedestrian path and a separated bike lane.
- **Education, Arts & Culture:** Community members were interested in seeing the incorporation of art, cultural, and educational features into the project designs.
 - Incorporation of art, cultural, and educational features can be incorporated into all project site designs and is particularly highlighted for the La Jolla Shores and Sunset Cliffs project sites, where educational signage or art can raise awareness of the history, cultural, and unique environmental features of the sites.
- **Native Plants:** Community members strongly supported use of native plants in project design.
 - The use of native plants is identified as a project design feature for the Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Beachfront, and Sunset Cliffs project sites. A specific plant palette for each of the project sites will be developed in future phases of project development.
- **Stormwater Drainage:** Community members cited the need for stormwater drainage improvements at many of the project sites.
 - Stormwater drainage improvements were not scoped for this phase of the project but have been identified in the plan under “For Further Consideration” for the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Ocean Beach – Dog Beach, Ocean

Beach – Beachfront, and Sunset Cliffs project site. Stormwater drainage improvements will be considered as project design moves forward.

- **Adaptation Strategies:** Community members would like to see additional information regarding how the nature-based solution projects will function and more specifics around design.
 - Grant funding secured through the State Coastal Conservancy Grant will support technical studies to inform project design specifications and provide insight to project performance over a range of sea level rise projections and storm conditions.
- **Continued Outreach:** Community members were interested in continued engagement opportunities as the projects move forward.
 - Grant funding secured through the State Coastal Conservancy Grant will support ongoing community outreach and engagement as the project designs are further developed and refined.

Community feedback received from all engagement activities helped to inform the project design to ensure that as the City plans for a more resilient coastline that is prepared for the challenges of sea level rise, we are centering community values and priorities. Continued community and Tribal engagement as these project concepts are further refined, finalized and implemented will be essential for project success. More information on the feedback received through community and stakeholder engagement is available in Appendix C: Community and Stakeholder Engagement Summaries.

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Department Director

Casey Smith

Deputy Chief Operating Officer