



SUBJECT

Draft Hayward Regional Shoreline Adaptation Master Plan

RECOMMENDATION

That the Planning Commission review the draft Hayward Regional Shoreline Adaptation Master Plan and provide feedback on the Plan, including the Preferred Alternative and Policies and Programs.

SUMMARY

The Hayward Area Shoreline Planning Agency (HASPA) is preparing a Shoreline Adaptation Master Plan to make the shoreline more resilient to the effects of sea level rise. This is a work session to obtain feedback from the Planning Commission on the Preferred Alternative as well as the Policies and Programs identified in the Plan.

BACKGROUND

HASPA is a joint powers agency whose mission is to coordinate agency planning activities and plan for sea level rise to ensure the Hayward Regional Shoreline's natural, recreational, and man-made resources are protected for future generations. Established in 1970, HASPA's member agencies are the City of Hayward, the Hayward Area Recreation and Park District (HARD), and the East Bay Regional Park District (EBRPD). The City, HARD and EBRPD each have one Board member serving on the Board of Trustees. In addition, HASPA's Technical Advisory Committee (TAC) is made up of staff from the three member agencies.

HASPA has completed two vulnerability assessments for the shoreline, which identified vulnerable assets and potential adaptation strategies. The *Preliminary Study of the Effect of Sea Level Rise on the Resources of the Hayward Shoreline*, which outlines four long-term adaptation strategies to protect critical assets, was completed in 2010. The *Hayward Resilience Study*, which was an extension of the Adapting to Rising Tides Project led by the San Francisco Bay Conservation and Development Commission (BCDC), was completed in 2014. Both studies are available on the project webpage¹. The Hayward Shoreline Adaptation Master Plan builds off these past studies to identify specific adaptation strategies, policies, and design alternatives to protect identified vulnerable assets.

¹ <https://www.hayward-ca.gov/shoreline-master-plan>

On July 24, 2018², on behalf of HASPA, Council authorized the receipt of grant funds from Caltrans to prepare the Hayward Regional Shoreline Adaptation Master Plan. On December 18, 2018³, Council authorized, on behalf of HASPA, a contract with SCAPE. SCAPE is a landscape architecture firm with extensive experience preparing adaptation plans to address sea level rise.

SCAPE began work in early 2019 with the preparation of a *Background Report* which identified ecological resources, cultural resources, critical infrastructure, land use patterns, and demographics within the site area. Concurrently, SCAPE produced the *Data Collection and Sea Level Rise Mapping Report*, which gathered data on sea level rise and updated the inundation maps for the Hayward Regional Shoreline Area. Maps exhibited inundation from 2 feet, 4 feet, and 7 feet of sea level rise as well as groundwater emergence and the 100-year storm surge. These metrics are representative of expected sea level rise in 30, 60 and 80 years, according to medium-high risk aversion projections from the California Coastal Commission. Both reports are available on the project webpage⁴.

In March of 2019, a survey was conducted to assess the public's general understanding of the Hayward shoreline, sea level rise, potential flooding, and participants' feelings, concerns, and predictions regarding these issues. The survey was completed by approximately 900 people and the results are summarized in the Background Report. SCAPE and HASPA hosted two stakeholder workshops on May 16, 2019 and October 28, 2019 to gather critical input on the Plan. On October 27, 2019, the public was invited to attend a Shore Tour which highlighted different sea level rise adaptation strategies.

In late 2019, staff from the three HASPA agencies worked with SCAPE to prepare a *Goals and Policies Memo*. The Project Goals outlined in that report were:

- Create a Resilient Shoreline Environment for People and Ecology
- Enhance the Shoreline Environment to Reduce Risk to Critical Infrastructure and Built Assets
- Build Social Resilience in the Community
- Build Capacity for Future Generations to Adapt to climate change

Concurrently, HASPA staff and SCAPE produced the *Adaptation Strategies Report* that outlines potential adaptation strategies including nature-based, engineered, and non-structural strategies. A series of stakeholder meetings were held during the week of January 6, 2020 with Alameda County Flood Control District, Caltrans, East Bay Discharge Authority, Oro Loma Sanitary District, Hayward Public Works and Utilities, Russell City Energy Center, and the San

² <https://hayward.legistar.com/LegislationDetail.aspx?ID=3582257&GUID=A2889995-AD55-4F83-81BD-A08B5B8C3CE5&Options=&Search=>

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=3784499&GUID=3BAB6DE9-C3AF-407D-A69A-0DD563977C96&Options=&Search=>

⁴ <https://www.hayward-ca.gov/shoreline-master-plan>

Francisco Bay Conservation and Development Commission to discuss different adaptation strategies.

Building upon the *Adaptation Strategies Report* and stakeholder feedback, staff from the three HASPA agencies and SCAPE developed three *Preliminary Design Alternatives* for the Hayward Shoreline. The Alternatives include three different approaches intended to reduce risk by considering perimeter protection for critical assets and an adaptive approach for shoreline ecosystems. Another series of stakeholder meetings was held virtually during the week of April 6, 2020 to receive input on the three *Preliminary Design Alternatives*. This included stakeholders from the previous meetings and new stakeholders including California Fish and Wildlife, South Bay Salt Ponds, and the Bay Trail. Stakeholders indicated support for specific elements within the *Preliminary Design Alternatives* that reflected their agency's mission and goals. They encouraged a hybrid Preferred Alternative that include elements from all three alternatives.

On May 5th 2020⁵, the City Council held a work session on the Shoreline Adaptation Master Plan and provided feedback to staff on the three *Preliminary Design Alternatives*. Council was supportive of elements from all three alternatives and encouraged a Preferred Alternative that was a hybrid of all three alternatives.

In light of the COVID-19 pandemic, the project team launched a public forum website to gather public feedback on the Design Alternatives in early June, 2020⁶. The website was promoted on social media and through emails to industrial businesses and community members. The website garnered more than 900 unique users and 55 comments from community members. Many community members expressed a strong connection to the shoreline, encouraging the preservation of recreational resources and educational programming. They were very supportive of the ecological elements within the Design Alternatives including ecosystem restoration, ecological preservation, and habitat protection. Additionally, they advocated for mitigating future impacts of climate change now by adapting infrastructure and preserving the built environment but understood there may be a future need to move assets inland.

At the July 9th HASPA Board of Trustees meeting⁷, SCAPE shared comments received on the Preliminary Design Alternatives and presented the draft Preferred Alternative. The Board of Trustees expressed support for the Preferred Alternative and appreciated how it balanced stakeholders' needs. On October 9th, 2020, the draft Shoreline Adaptation Master Plan in its entirety was presented to the Board of Trustees⁸. A summary of comments received from the meeting will be presented in detail during the Planning Commission meeting.

⁵ <https://hayward.legistar.com/LegislationDetail.aspx?ID=4432812&GUID=3DD619A8-210F-4C7E-9636-1BDB7908C3E9&Options=&Search=>

⁶ <https://haywardshoreslinemasterplan.com/>

⁷ <https://hayward.legistar.com/MeetingDetail.aspx?ID=794926&GUID=08E06003-082A-4A8B-9204-A9C78C8E7AC2&Options=&Search=>

⁸ <https://hayward.legistar.com/MeetingDetail.aspx?ID=806168&GUID=A8EBEDES-54AE-454E-AF9D-28902F0F3588&Options=info|&Search=>

DISCUSSION

Building upon City Council, the HASPA Board of Trustees, stakeholder and community member feedback, staff from the three HASPA agencies and SCAPE developed the *Draft Hayward Regional Shoreline Adaptation Master Plan*, which is available on the project webpage (<https://www.hayward-ca.gov/shoreline-master-plan>). The Plan includes information from previous reports, the Preferred Design Alternative, a phasing plan and non-structural strategies. Staff now seeks the Commission's input on the Preferred Design Alternative and the Policies and Programs outlined for the Hayward Regional Shoreline.

Preferred Alternative – The Preferred Alternative is a hybrid of the *Preliminary Design Alternatives* that balances risk reduction and ecological enhancement along the Shoreline. The Preferred Alternative features a FEMA certified flood protection levee that will provide protection from approximately 4 feet of sea level rise. The levee starts along San Lorenzo Creek and wraps in front of Oro Loma Wastewater Treatment plant. It pulls back along the Union Pacific Rail Corridor then moves south, tying back to higher elevation at the landfills. The levee runs along the landfills' edges then aligns with the western extent of the City's wet weather storage ponds. The alignment pulls back in the southern portion of the site to wrap behind the Salt Marsh Harvest Mouse Preserve, then ties back along a new levee parallel to the access road for SR-92. This levee will provide protection to the industrial and residential neighborhoods near the project area.

The Preferred Alternative also maintains recreation elements along the Shoreline by adapting the Bay Trail over time and renovating the Hayward Shoreline Interpretive Center. The Bay Trail's current alignment would be maintained until no longer possible at which point it would run atop the FEMA certified flood protection levee. The levees surrounding the Hayward Shoreline Interpretive Center would be raised in the short-term and the center itself will be elevated in place in the long-term, ensuring future generations can enjoy this educational resource. The Phasing Plan divides the adaptation projects into three phases: short term (for the first ten years); medium term (2030 through 2045); and long term (2045 and beyond).

Policies and Programs – In addition to the built design, the *Draft Shoreline Adaptation Master Plan* identifies non-structural strategies including Policies and Programs to increase resiliency along the shoreline. The recommended Policies and Programs are as follows:

- Advance regional dialogue into mechanisms for balancing the protection of at-risk communities and infrastructure and restoring ecosystems
- Increase flood protection standards for new construction and renovations
- Remove regulatory impediments to higher standards of flood protections
- Provide support for property owners to protect assets through loans, grants and tax incentives.
- Develop technical support and education to help industrial businesses understand risks from sea level rise and develop mitigation actions.

- Plan for long-term growth management and potential strategic relocation of the Industrial District.

Once finalized and adopted, the Shoreline Adaptation Master Plan will provide a roadmap of policies, programs and projects that may be implemented over the next 30 years creating a long-term vision for the shoreline.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of “Combat Climate Change”. Specifically, this item relates to the implementation of the following project:

- Project 9: Complete Shoreline Master Plan

POLICY CONTEXT

The Shoreline Adaptation Master Plan will provide a framework for resiliency to sea level rise and support the following General Plan and Climate Action Plan Goals.

- NR-1.4: The City shall coordinate with the Hayward Area Shoreline Planning Agency, Bay Conservation and Development Commission, and California Coastal Commission to conserve, protect, and enhance natural and cultural resources along the San Francisco Bay shoreline by balancing uses that support multiple community needs, such as recreation, tourism, cultural resource preservation, and natural resource protection
- NR-3.2: The City shall coordinate with Hayward Area Shoreline Planning Agency, East Bay Regional Park District, Bay Conservation and Development Commission, California Coastal Commission, and other Federal, State, and regional agencies to identify methods for acquiring and restoring baylands and marsh habitats, expanding the National Wildlife Refuge, and funding the purchase and restoration of wetland habitats.
- HAZ-3.4 The City shall coordinate with the Alameda County Flood Control and Water Conservation District to evaluate the need to expand the capacity of flood control facilities based on changing flood conditions associated with global warming and extreme weather.
- HAZ-4.1: The City shall monitor information from regional, State, and Federal agencies on rising sea levels in the San Francisco Bay to determine if additional adaptation strategies should be implemented to address flooding hazards
- HAZ-4.3: The City shall coordinate with the Hayward Area Shoreline Planning Agency, the Bay Conservation Development Commission, and other agencies involved in the Adapting to Rising Tides Project to develop and implement a Regional Shore Realignment Master Plan.
- HQL-9.7: The City shall examine the potential long-term impacts of climate change on the social, economic and environmental well-being of the city of Hayward.

- HQL-9.9: The City shall support plans, standards, regulation, incentives, and investments to reduce the impacts of climate change on those populations most vulnerable to the impacts of climate change
- HQL-11.1: City shall establish and maintain an integrated recreational corridor system that connects regional trails (e.g., Bay Trail), Baylands (i.e., Hayward Regional Shoreline), local creeks and open space corridors, hillside areas, and EBRPD and HARD parks.
- PFS-1.7: The City shall monitor impacts of climate change of the city's infrastructure and services and make appropriate adaptive facility and service modifications and upgrades.
- PFS-6.1 Interagency Levee Management. The City shall work with Alameda County Flood Control and Water Conservation District, State, and Federal agencies to ensure existing and new levees are adequate in providing flood protection.

ENVIRONMENTAL REVIEW

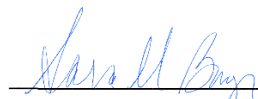
In the coming months, HASPA's TAC will determine the appropriate approach for conducting environmental review of the Shoreline Adaptation Master Plan. Once a determination is made, a Request for Proposals may be prepared and released to hire an environmental consultant. The environmental review process is expected to begin later this year and continue into 2021.

NEXT STEPS

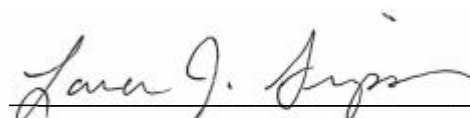
Following the Planning Commission work session, staff will present the Shoreline Adaptation Master Plan, including the Commission's comments, at a Work Session with Council on November 10, 2020. Staff will also conduct another round of virtual outreach utilizing the project website, email listservs and social media to gather comments on the Plan. Subsequently, staff will work with SCAPE, EBRPD and HARD to incorporate any comments received and update the Plan accordingly. The Plan is expected to be finalized and ready for final adoption in February 2021.

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