GRANT APPLICATION FORM

Coastal Commission staff is available to assist during the application process. Applicants are encouraged to reach out to the LCP Grant team with any questions as they develop their applications.

Please note the entire grant application will be public record upon submittal. Click in the shaded text fields to enter text, numbers and dates. The fields will expand to accommodate the data.

APPLICANT INFORMATION

Applicant name (agency): City of Huntington Beach	
Address: 2000 Main Street, Huntington Beach, CA 92648	
Contact name: Jennifer Villasenor	Title: Deputy Community Development Director
Telephone: 714-374-1661	Fax:
Email: JVillasenor@surfcity-hb.org	
Federal Tax ID#: 95-6000723	

Person authorized to sign grant agreement and amendments:	
Name: Dave Kiff	Title: Interim City Manager
Application prepared by:	
Name: Jane James	Title: Planning Manager

Signature: _____ Date: 9/4/2019

PROJECT INFORMATION

Project title:	Huntington Beach Comprehensive Local Coastal Program Update		
LCP/LCP Segment:	Entire Huntington Beach LCP Boundary		
Project location			
City/Geographic area:	Huntington Beach		
County:	Orange		
GPS: Lat 33.657222 Lon -118.001944			
Project timeline			
Start date:	11/6/2019	End date:	11/30/2021

CALIFORNIA COASTAL COMMISSION LCP PLANNING GRANT APPLICATION TABLE OF CONTENTS

Coastal Zone & Planning Area Map ……....1

Project Description ……..3

Task Descriptions ……5

Schedule ……11

Budget ……...14

Signed Resolution ……16

Appendix ……..A1

COASTAL ZONE & PLANNING AREA MAP:

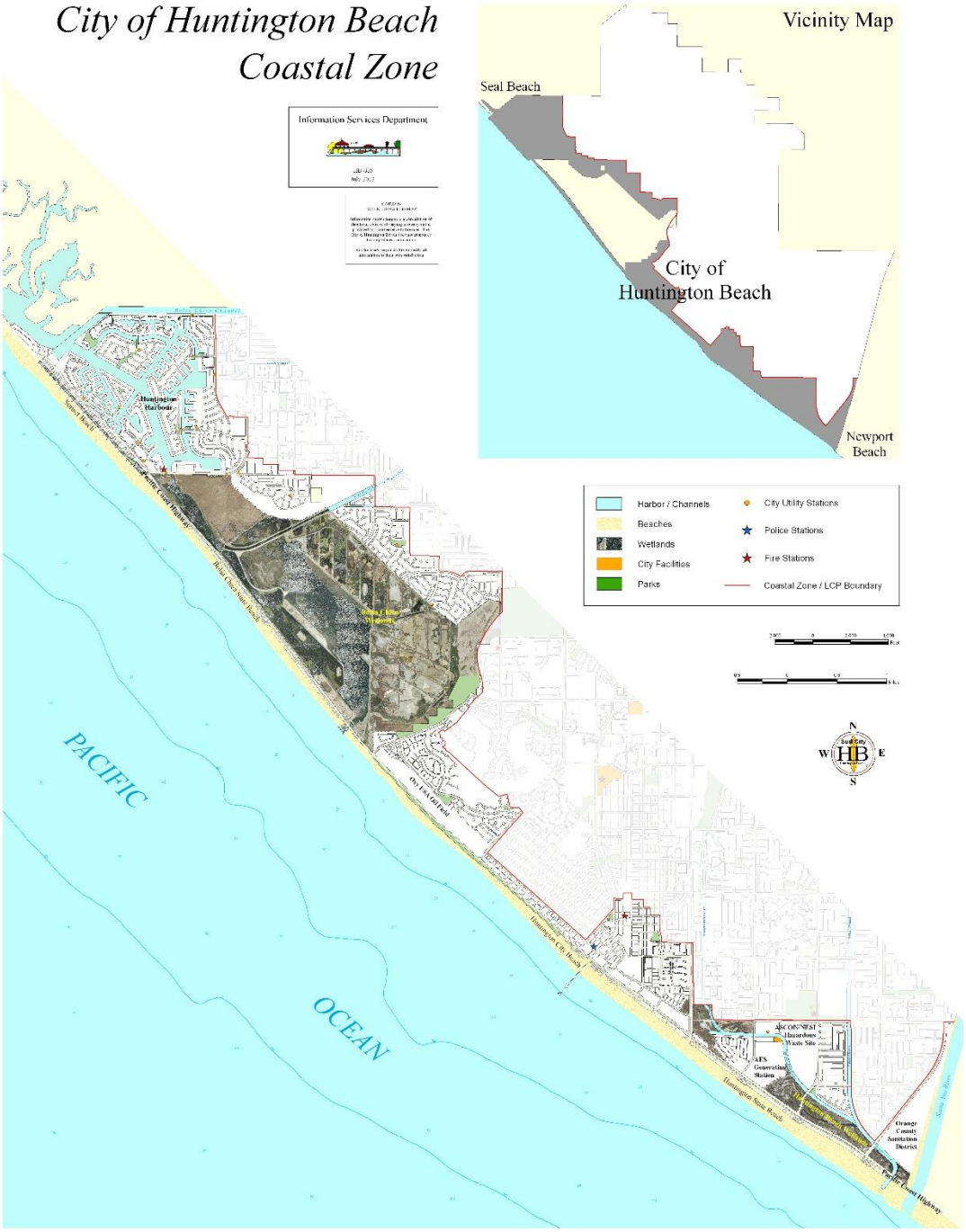


FIGURE 1: *City of Huntington Beach Costal Zone/LCP Boundary*

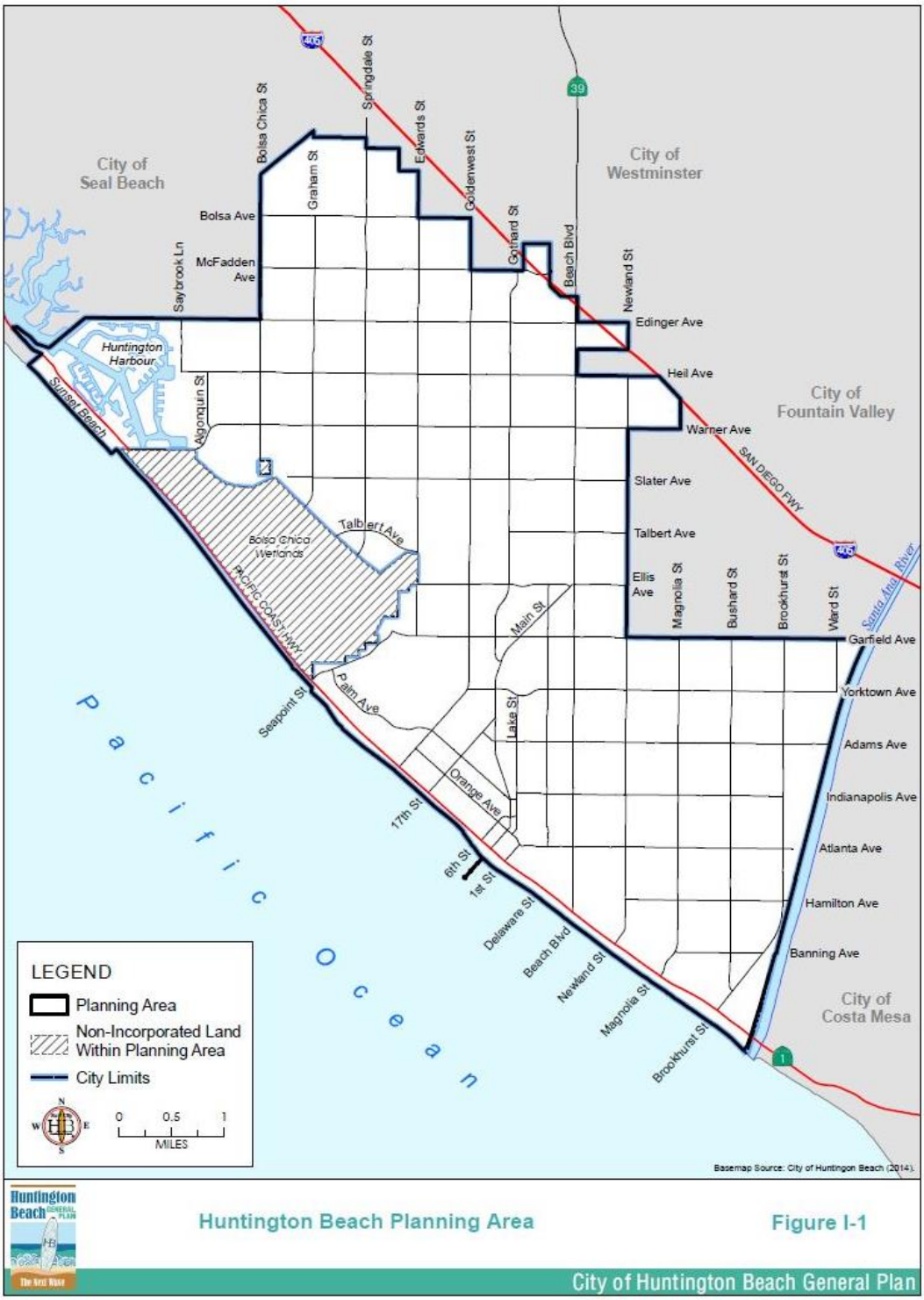


***FIGURE 2**: City of Huntington Beach Planning Area*

PROJECT DESCRIPTION – Project Summary

The scope of the proposed project includes an update to the Sea Level Rise (SLR) Vulnerability Assessment that was completed in 2014 in preparation for the City of Huntington Beach's General Plan Update. This update will inform the development and adoption of a Coastal Resiliency Program (CRP) Update and a comprehensive update to the Coastal Element of the City's Local Coastal Program (LCP), which has not been comprehensively updated since 2001. The SLR Vulnerability Study will also inform development and adoption of an update to the City's existing Floodplain Ordinance. Project benefits will extend beyond the Coastal Zone to other impacted areas of the City. The City has 11,617 homes in the Coastal Zone but approximately 30,000 homes in the total area of the City are currently or will be exposed to inundation (over 1/3 of the City's housing units).

Project Goals and Objectives

Goal 1: Update the City's 2014 SLR Vulnerability Assessment to incorporate new California Coastal Commission (CCC) Guidance and best available science

Objectives:

1) Incorporate guidance outlined in the 2015 Original SLR Policy Guidance document, the 2018 Science update to the SLR Policy Guidance, and best available science outlined in the 2018 OPC State SLR Guidance Document
2) Model new SLR scenarios in conjunction with other coastal flooding factors
3) Complete an updated vulnerability assessment for geo-referenced resources, infrastructure and facilities

Goal 2: Update the City's Coastal Resiliency Program to include new findings from the SLR Vulnerability Assessment Update

Objectives:

1) Conduct an outreach process specific to the issue of SLR that educates and engages stakeholders
2) Develop an updated menu of SLR-related policies to include in the CRP Update
3) Identify other City plans that will require modification, e.g. infrastructure master plans

Goal 3: Develop and adopt a comprehensive update of the Coastal Element of the City's LCP and Floodplain Ordinance based on the findings of the vulnerability assessment and policy analysis

Objectives:

1) Implement findings from Goals 1 and 2 to draft an updated Coastal Element and updated Floodplain Ordinance
2) Conduct an analysis to prioritize the potential land use and other implementation improvements identified in the draft documents, based on vulnerability, impact, timeframe, and cost.
3) Review and identify potential funding sources for future implementation of identified priority projects
4) Involve community members, the CCC, City staff, officials, and other relevant parties in the process of developing the Coastal Element and Floodplain Ordinance updates.

Greenhouse Gas Reduction Fund Goals & Priority Population Benefits

This project will meet multiple Greenhouse Gas Reduction Fund goals and provide several co-benefits, including climate adaptation, community engagement, and jobs. Conducting an updated SLR analysis will enable the City to develop an updated CRP, Coastal Element Update, and Floodplain Ordinance Update. Once adopted, these plans will empower the City to better align its policies and priority implementation projects with the goal of mitigating the impacts of climate change, whose negative impacts will be particularly severe for coastal communities. In the process of developing these documents, the City will conduct extensive community engagement to ensure ample opportunity for input from stakeholders and those that will be most impacted by climate change, including disadvantaged and low-income communities. As identified by the California Air Resources Board Priority Population Map, there are multiple AB-1550 Low-Income Communities located within 1-2 miles of the boundaries of the City's Coastal Zone (see attached Appendix 1). These communities encompass a total population of over 15,000 residents (U.S. Census Bureau Census Tract Data). The City will conduct

targeted outreach to these communities to ensure opportunities to participate in the planning process. Once these documents are finalized and priority implementation projects have been identified, there will be a potential for future jobs as the City secures funding for implementation of these priority projects.

Consistency with Selection Criteria

Criteria 1: Public Benefit/Significance and Environmental Justice

This project will address issues of statewide significance and maximize public benefits of the coast, primarily by addressing the impacts of climate change and sea level rise through the proposed SLR assessment and subsequent CRP Update, Coastal Element Update, and Floodplain Ordinance Update. This project will also address issues of environmental justice and disparities in climate change impacts by conducting targeted outreach to priority population communities located in close proximity to the City's Coastal Zone.

Criteria 2: Addressing the Effects of Climate Change

This project will result in a comprehensive LCP update that addresses the effects of climate change, particularly sea level rise, and which identifies planning and implementation strategies to adapt to sea level rise. A key deliverable of this project will be a CRP Update that will enable the City to effectively plan for and adapt to current and future sea level rise that will impact communities in and beyond the Coastal Zone.

Criteria 3: Relative Need for LCP Update

With 9.5 miles of coastline, 11 million annual visitors to its City and State beaches, extensive wetlands that provide critical habitat for numerous endangered species, and 19 percent of its geographic boundary located within the Coastal Zone, the City prides itself on being a responsible steward of its share of the coastline. To this end, in preparation for the 2017 comprehensive General Plan Update, the City prepared a SLR Vulnerability Assessment in 2014. In recognition of assessment findings and to demonstrate the City's commitment to addressing SLR, the City's adopted General Plan includes a new goal and several broad policies to ensure that the City is preparing for a changing coastline. The SLR assessment was consistent with CCC Guidance at the time of adoption but does not incorporate new guidance outlined in the 2018 Science update to the SLR Policy Guidance, or the best available science outlined in the 2018 OPC State SLR Guidance Document. Additionally, the City's last comprehensive update to the Land Use Plan/Coastal Element of the City's certified LCP occurred in 2001. As such there is a critical need to update the LCP at this time, particularly in light of hazards identified in the 2014 SLR Assessment, some of which are highlighted in the attached Appendix.

Criteria 4: Likelihood of Success/Effectiveness

To ensure successful and effective completion of the proposed project, the City will coordinate with the CCC to meet all required policies and procedures. The City will conduct extensive outreach to also coordinate with the public and with other local stakeholder organizations. Further, the City Council of the City of Huntington Beach has adopted a resolution authorizing this proposal and committing to completing an LCP Amendment.

Criteria 5: Project Integration/Leverage/Matching Funds

In addition to the $100,000 in City matching funds identified in the project budget, this project will build on past funding leveraged for related planning efforts. As part of the 2017 General Plan update, the City contributed approximately $150,000 for preparation of a SLR Vulnerability Assessment and CRP. Previously, in 2013, the City also collected topographic LIDAR data with 1-foot contour intervals, contributing $39,750 for these data collection costs. Additionally, as part of the planning process for the Magnolia Tank Farm Project, the project applicant expended approximately $130,000 for preparation of a SLR vulnerability assessment. The Coastal Conservancy has identified the Magnolia Tank Farm as a high opportunity project due to the inclusion of family and group-oriented lower cost lodging accommodations in the project proposal, as well as its partnership with the Huntington Beach Wetlands Conservancy to develop educational programs for the public.

TASK DESCRIPTIONS:

Task 1. Project Launch

1.1 Project Kick-off meeting

- Following the award, a kick-off meeting with California Coastal Commission (CCC) staff will be held to discuss grant procedures and project expectations, including the project schedule, invoicing, quarterly reporting, and other relevant information. The City will produce notes summarizing the meeting.
- **Responsible Party: City of Huntington Beach**

1.2 Consultant Selection Process

- Complete process for selection of a consultant using State-approved procurement procedures. The City will select a qualified consultant that can complete the proposed project in accordance with CCC Objectives.
- **Responsible Party: City of Huntington Beach**

1.3 Staff Coordination with Selected Consultant to Track Project Progress

- The City and consultant will conduct regular phone calls to facilitate effective communication regarding upcoming tasks and ensure the project is completed in a timely and fiscally responsible manner. Notes summarizing communications between the City and consultant will be developed for the quarterly updates to the CCC.
- **Responsible Party: City of Huntington Beach and Consultant**

Task 1.4 Invoicing & Quarterly Reporting

- As required by grant administration procedures, the City will submit complete invoice packages to CCC staff based on milestone completion on a quarterly basis. The City will also submit quarterly reports to CCC staff providing a summary of project progress and grant/local match expenditures. Consultant is responsible of drafting reports and the City is responsible of reviewing reports before sending to the CCC.
- **Responsible Party: City of Huntington Beach and Consultant**

Task 1 Deliverables

Task	***Deliverable***
1.1	Project Kick-off meeting notes
1.2	Staff coordination notes
1.3	Copy of Procurement Procedures and Executed Consultant Contract
1.4	Invoice packages and quarterly reports

Task 2. Sea Level Rise Vulnerability Assessment Update

2.1 Background Data Collection Update to Incorporate New CCC Guidance and Best Available Science

- In 2017, the City adopted a comprehensive update to the General Plan. As part of the General Plan update effort, in 2014, the City prepared a SLR Vulnerability Assessment that was consistent with the adopted CCC Guidance available at the time.
- This previously completed SLR Vulnerability Assessment does not include new guidance from the CCC that has been adopted in the years since, including the 2015 Original SLR Policy Guidance Document and the 2018 Science Update to the SLR Policy Guidance. It also does not include the best available science outlined in the 2018 OPC State SLR Guidance Document.
- To update the existing SLR Vulnerability Assessment for consistency with new CCC guidance, the consultant will collect and analyze the best available data and projections provided in the 2018 OPC State SLR Guidance Document.
- **Responsible Party: Consultant**

2.2 Coastal Conditions Assessment

- The consultant will complete an updated coastal conditions assessment that incorporates new CCC guidance. This data analysis will provide the range of beach profiles from multiple seasons, and from each profile will be extracted beach slopes (for wave runup), backshore toe elevation (for calculating erosion potential), and crest elevation (for calculating wave overtopping and flooding). A mean high-water shoreline location will be extracted for inclusion in the historical shoreline change analysis. This will result in a backshore classification showing locations of coastal armoring, inlets, and dunes that have the relevant geomorphic data necessary to run SLR models.
- **Responsible Party: Consultant**

2.3 Planning Area Inventory Update

- As part of the 2014 SLR Vulnerability Assessment, the City completed a geo-referenced inventory of facilities potentially affected by SLR. The assessment found that by 2030 and 2050 major roadways, public facilities, and residential areas in the coastal zone are vulnerable during combined extreme high tide and coastal storm wave events. By 2100 there is potential for widespread inundation across large portions of northern Huntington Beach in the vicinity of Sunset Beach, Huntington Harbor, and Bolsa Chica. Critical facilities like the AES Southland (AES) power plant and the Orange County Sanitation District (OCSD) wastewater treatment facility in south Huntington Beach are vulnerable to tidal inundation, extreme wave events, and stormwater runoff. Beaches, stormwater and transportation infrastructure, public facilities, ecosystems, and commercial and residential buildings are also vulnerable.
- As part of the proposed SLR update, the consultant will analyze this existing inventory of impacted facilities for consistency with updated SLR Vulnerability Assessment findings, with CCC SLR Adopted Policy Guidance, and with the 2018 OPC State SLR Guidance. This inventory will be updated and augmented if necessary.
- **Responsible Party: Consultant**

2.4 Outreach Prior to Modeling

- The consultant will solicit input from the CCC and other resource agency staff regarding data and approach.
- **Responsible Party: Consultant**

2.5 Model SLR Scenarios

- The City's 2014 SLR Vulnerability Assessment included a citywide assessment that divided the City into shoreline and inland waterway planning areas and evaluated six scenarios utilizing three different horizon years (2030, 2050, and 2100) with low and high SLR estimates.
- The consultant will model new SLR scenarios in conjunction with other coastal factors as identified in the City's LCP and based on agency guidance, such as erosion, flooding and storm impacts, inundation, and saltwater intrusion into freshwater resources. In modeling a range of updated SLR scenarios based on the best available science, the consultant will follow the guidance provided in the 2018 OPC State SLR Guidance.
- **Responsible Party: Consultant**

2.6 Conduct Updated SLR Vulnerability Assessment

- An updated SLR vulnerability assessment will be conducted for each of the infrastructure elements and other development categories identified such as public access, recreation facilities and environmentally sensitive habitat and will be performed in accordance with the 2018 OPC State SLR Guidance Document. Sensitivity assessments will consider how sensitive a planning area is to projected effects, as well as its capacity to adapt to those effects.
- **Responsible Party: Consultant**

2.7 Study Approach Summary

- Consultant will prepare a summary of project approach and analysis methods for reference use by other jurisdictions and resource agencies.
- **Responsible Party: Consultant**

Task 2 Deliverables

Task	***Deliverable***
2.1	Inventory of data gathered provided in electronic format
2.1-2.3	Updated Baseline Conditions Assessment Memo
2.4-2.7	SLR Vulnerability Assessment and summary of study approach

Task 3. Coastal Resiliency Plan Update

3.1 Review Current Coastal Resiliency Program, Existing Studies, and Adaptation Policies

- As part of the 2017 General Plan Update, the City prepared a Coastal Resiliency Program (CRP) and identified strategies and implementation measures to address and adapt to hazards associated with SLR. The CRP was intended to serve as a "bridge document" linking the General Plan to a future comprehensive LCP update in an advisory manner that allows both documents to incorporate SLR considerations, consistent with new CCC Guidance, into the planning process to achieve a common vision for a resilient community. As a result, some of the recommended strategies and implementation steps described in the current Coastal Resiliency Program were identified as more appropriate for addressing in a future LCP Update.
- The consultant will review the City's current CRP as well as existing studies and adaptation policies that have been implemented elsewhere in order to consider best practices for completing the proposed CRP Update. The consultant also will review updates to the CCC's SLR policy guidance

that have been adopted since the City completed this initial CRP document, including the 2015 Original SLR Policy Guidance Document, the 2018 Science Update to the SLR Policy Guidance, and the 2018 OPC State SLR Guidance Document.

- **Responsible Party: Consultant**

3.2 Conduct a Public Outreach Process

- The City and the consultant will conduct a public outreach process that educates and engages the community and other stakeholders affected by SLR. In contrast to public outreach completed for the CRP as part of the General Plan update, this public outreach process will be specific to the impacts of SLR and will focus on educating and engaging stakeholders in the CRP update process. The City will also solicit input from CCC and other resource agency staff as well as the local community during Plan reparation. A potential obstacle associated with this aspect of the work plan is the possible time delay associated with soliciting input from a variety of agencies and individuals.
- **Responsible Party: City of Huntington Beach and Consultant**

3.3 Develop SLR-Related Options and Policies

- The consultant will develop an updated menu of SLR-related options and policies that may be used by the City to address potential hazards and to incorporate these policies in the LCP update.
- **Responsible Party: Consultant**

3.4 Prepare Coastal Resiliency Plan

- The consultant will prepare an update to the Coastal Resiliency Plan as a result of the vulnerability assessment and an evaluation of the options and policies, which includes guiding principles, goals and preparedness actions. Reviewing data for both inside and outside the Coastal Zone may help assign varying levels of priority for facilities and resources. For example, facilities within the Coastal Zone could be assigned to short-term mitigation plans, and facilities located inland of the Coastal Zone could be designated for longer-term solutions. The second potential obstacle in the work plan is the challenge of developing consensus around policies and strategies that result in trade-offs.
- **Responsible Party: Consultant**

3.5 Establish a Monitoring Program

- With the assistance of the consultant, the City will establish a monitoring program based on public data sources.
- **Responsible Party: City of Huntington Beach and Consultant**

Task 3 Deliverables

Task	***Deliverable***
3.1, 3.3, 3.4	Coastal Resiliency Program Update
3.2	Public Outreach Presentation, Summary, and Photos
3.5	Monitoring Program Summary

Task 4. Coastal Element Update

4.1 Draft Coastal Element Update

- Based on the data collected and policy framework, the consultant will identify components of the General Plan Coastal Element, which functions as the Land Use Plan component of the City's certified LCP, and LCP Implementing Ordinances that warrant modification. The consultant will also identify other plans, such as infrastructure master plans that may also require modification in light of new findings from the updated SLR Vulnerability Assessment. After identifying these elements and the feedback gathered in the public outreach meetings conducted as part of Task 3, the consultant will develop a Draft Coastal Element Update. The Draft will be posted on the City's website and distributed to interested parties for comment. The City will also work with the CCC to revise the draft as necessary and will incorporate any input into the final draft of the Coastal Element for CCC certification.
- **Responsible Party: City of Huntington Beach and Consultant**

4.2 Prioritize Implementation Elements for Implementation Program and Identify Funding Sources

- The consultant will conduct an analysis to prioritize the potential land use and other implementation improvements based on vulnerability, impact, timeframe, and cost. The consultant will also review and identify potential funding sources for future implementation of priority projects.
- **Responsible Party: Consultant**

4.3 Final Coastal Element Update

- Complete the final report that addresses the comments from Community Workshops, public feedback gathered during the community outreach for sea level rise vulnerability and risk assessment (Task 2), and input from the CCC, City staff, officials, or other relevant parties on the Draft Coastal Element Update. The consultant will submit hard copies and electronic copies to the CCC. All plans will credit the financial contribution of the grant program on the cover of the report.
- **Responsible Party: Consultant**

4.4 City Council Adoption

- Presentation by consultant on the final Coastal Element Update at a City Council meeting. Resolve any issues, if applicable. Adopt final City of Huntington Beach Coastal Element Update for the City's LCP.
- **Responsible Party: City of Huntington Beach and Consultant**

Task 4 Deliverables

Task	***Deliverable***
4.1	Draft Coastal Element Update
4.2	Priority Report and Potential Funding Sources
4.3	Final Coastal Element
4.4	Slideshow Presentation and Meeting Notes

Task 5. Floodplain Ordinance Update

5.1 Draft Floodplain Ordinance Update

- Based on the data collected and policy framework, the consultant will identify components of the City's Floodplain Ordinance that warrant modification. After identifying these elements and the feedback gathered in the public outreach meetings conducted as part of Task 3, the consultant will develop a Draft Floodplain Ordinance Update. The Draft will be posted on the City's website and distributed to interested parties for comment.
- **Responsible Party: Consultant**

5.2 Public Outreach and Information Process

- The City and the consultant will conduct a public outreach process that educates and engages the community and other stakeholders regarding the proposed updates to the Floodplain Ordinance.
- **Responsible Party: City of Huntington Beach and Consultant**

5.3 Final Floodplain Ordinance Update

- Complete the final report that addresses the public outreach process and input from City staff, officials, or other relevant parties on the Draft Floodplain Ordinance Update. The consultant will submit hard copies and electronic copies to the CCC.
- **Responsible Party: Consultant**

5.4 City Council Adoption

- Presentation by consultant on the final Coastal Element Update at a City Council meeting. Resolve any issues, if applicable. Adopt final City of Huntington Beach Floodplain Ordinance Update.
- **Responsible Party: City of Huntington Beach and Consultant**

Task 5 Deliverables

Task	***Deliverable***
5.1	Draft Floodplain Ordinance Update
5.2	Public Outreach Slideshow Presentation and Meeting Notes
5.3	Final Floodplain Ordinance Report
5.4	Slideshow Presentation and Meeting Notes

SCHEDULE:

Proposed starting date: 11/1/2019
Estimated completion: 11/30/2021

Task 1. Project Launch	Projected start date: 11/6/2019	End date: 2/5/2020
1.1 Project Kick-off meeting	Projected start date: 11/6/2019	End date: 11/6/2019
1.2 Staff Coordination	Projected start date: 11/6/2019	End date: 3/31/2022
1.3 Consultant Selection Process	Projected start date: 11/7/2019	End date: 2/5/2020
1.4 Invoicing & Quarterly Reporting	Projected start date: 4/1/2020	End date: 3/31/2022
Outcomes *Clear project management expectations and accountability measures for consultant and City staff*	Projected start date: 4/1/2020	End date: 3/31/2022
Deliverables *Project Kick-off meeting notes; Staff coordination notes; Copy of Procurement Procedures and Executed Consultant Contract; Invoice packages and quarterly reports*	Interim start date: 4/1/2020	Interim end date: 3/31/2022
	Final start date: TBD	Final end date: TBD
Task 2. Sea Level Rise Analysis	Projected start date: 4/1/2020	End date: 7/31/2020
2.1 Background data collection	Projected start date: 4/1/2020	End date: 4/30/2020
2.2 Coastal conditions assessment	Projected start date: 4/1/2020	End date: 4/30/2020
2.3 Planning Area Inventory	Projected start date: 4/1/2020	End date: 4/30/2020
2.4 Outreach Prior to Modeling	Projected start date: 5/1/2020	End date: 5/29/2020
2.5 Model SLR Scenarios	Projected start date: 6/1/2020	End date: 6/12/2020
2.6 Conduct SLR Vulnerability Assessment	Projected start date: 6/15/2020	End date: 6/30/2020
2.7 Study Approach summary	Projected start date: 7/1/2020	End date: 7/17/2020
Outcomes *Incorporation of new CCC SLR Policy Guidance and Best Available Science as outlined in the 2019 OPC State SLR Guidance Document*	Projected start date: 5/1/2020	End date: 7/31/2020
Deliverables *Updated Baseline Conditions Assessment Memo, Inventory of data gathered provided in electronic format,*	Interim start date: 5/29/2020	Interim end date: 7/31/2020
	Final start date: TBD	Final end date: TBD

SLR Vulnerability Assessment and summary of study approach		
Task 3. Coastal Resiliency Plan	Projected start date: 8/3/2020	End date: 12/14/2020
3.1 Review Existing Studies and Adaptation Policies	Projected start date: 8/3/2020	End date: 8/28/2020
3.2 Conduct a Public Outreach Process	Projected start date: 8/17/2020	End date: 10/16/2020
3.3 Develop SLR-Related Options and Policies	Projected start date: 9/1/2020	End date: 10/30/2020
3.4 Complete Initial Physical Modeling	Projected start date: 9/1/2020	End date: 9/30/2020
3.5 Prepare Coastal Resiliency Plan	Projected start date: 9/1/2020	12/14/2020
3.6 Establish a Monitoring Program	Projected start date: 11/2/2020	End date: 11/20/2020
Outcomes *Public engagement in the SLR and CRP update process, CRP Consistency with new CCC SLR Policy Guidance and 2019 OPC State SLR guidance, and improved SLR resiliency for the Huntington Beach Community*	Projected start date: 8/3/2020	End date: 12/14/2020
Deliverables *Public Outreach Presentation, Summary, and Photos; Coastal Resiliency Program Update; Monitoring Program Summary*	Interim start date: 8/17/2020	Interim end date: 12/14/2020
	Final start date: TBD	Final end date: TBD
Task 4. Coastal Element Update	Projected start date: 1/11/2021	End date: 11/30/2021
4.1 Draft Coastal Element Update	Projected start date: 1/11/2021	End date: 4/9/2021
4.2 Prioritize Implementation Elements for Implementation Program and Identify Funding Sources	Projected start date: 2/1/2021	End date: 4/9/2021
4.3 Final Coastal Element Update	Projected start date: 4/12/2021	End date: 7/30/2021
4.4 City Council Adoption	Projected start date: 10/1/2021	End date: 11/1/2021
Outcomes *Coastal element consistency with new CCC SLR Policy Guidance and 2019 OPC State SLR guidance, and improved SLR resiliency for the Huntington Beach Community, and consistency with goals outlined in the 2017 General Plan Update*	Projected start date: 1/11/2021	End date: 11/30/2021
Deliverables *Draft Coastal Element Update; Priority Report and Potential Funding*	Interim start date: 1/11/2021	Interim end date: 11/30/2021
	Final start date:	Final end date:

Sources; Final Report; Slideshow Presentation and Meeting Notes	TBD	TBD
Task 5. Floodplain Ordinance Update	Projected start date: 4/12/2021	End date: 11/30/2021
5.1 Draft Floodplain Ordinance Update	Projected start date: 4/12/2021	End date: 6/18/2021
5.2 Public Outreach and Information Process	Projected start date: 5/3/2021	End date: 6/30/2021
5.3 Final Floodplain Ordinance Update	Projected start date: 6/21/2021	End date: 7/30/2021
5.4 City Council Adoption	Projected start date: 10/18/2021	End date: 11/15/2021
Outcomes *Improved SLR resilience, preparation for SLR in areas of the City most vulnerable to SLR, and improved climate change adaptation*	Projected start date: 4/12/2021	End date: 11/15/2021
Deliverables *Draft Floodplain Ordinance Update; Public Outreach Slideshow Presentation and Meeting Notes; Final Floodplain Ordinance Report*	Interim start date: 4/12/2021	Interim end date: 11/15/2021
	Final start date: TBD	Final end date: TBD

Please list (1) all significant and pertinent project benchmarks related to the project for which funds are being requested, (2) expected dates for reaching or completing those steps. These dates will be used in monitoring grant progress and in grant reporting under approved grant agreements.

BENCHMARK SCHEDULE

ACTIVITY	COMPLETION DATE
Project Kickoff and Selection of Consultant	2/5/2020
Background Data Collection and Conditions Assessment	4/30/2020
Planning Area Inventory	4/30/2020
Public Outreach	6/30/2021
SLR Modeling and Vulnerability Assessment	6/30/2020
Coastal Resiliency Plan	12/14/2020
Coastal Element Update	11/30/2021
Floodplain Ordinance Update	11/30/2021

BUDGET:

APPLICATION BUDGET INFORMATION

Funding Request: $224,340 **Total Project Cost: $324,340**

	CCC Grant Total	*Match/Other Funds (Source #1 – City Funds)*	*Total (LCP Grant Funds + Match/ Other Funds)*
LABOR COSTS[1]			
County/City Staff Labor			
Task 1 – *Project Launch*	**$0**	**$3,500**	**$3,500**
Task 2 – *Sea Level Rise Analysis*	**$0**	**$6,000**	**$6,000**
Task 3 – *Coastal Resiliency Plan*	**$0**	**$7,000**	**$7,000**
Task 4 – *Coastal Element Update*	**$0**	**$30,000**	**$30,000**
Task 5 – *Floodplain Ordinance Update*	**$0**	**$24,000**	**$24,000**
Total Labor Costs	**$0**	**$70,500.00**	**$70,500.00**
DIRECT COSTS			
County/City Staff Project Supplies			
A – General Supplies	**$0**	**$1000**	**$1000**
Total	**$0**	**$1000**	**$1000**
County/City Staff Travel In State[2]			
Mileage, Hotel, etc.	**$0**	**$2,200**	**$2,200**
Total	**$0**	**$2,200**	**$2,200**
Consultants[3]			
Consultant A			
Task 1 – Project Launch	**$4,438.38**	**$401.62**	**$4,840**
Task 2 – Sea Level Rise Analysis	**$100,872.30**	**$9,127.70**	**$110,000**
Task 3 – Coastal Resiliency Plan	**$68,593.17**	**$6,206.83**	**$74,800**
Task 4 – Coastal Element Update	**$28,244.24**	**$2,555.76**	**$30,800**

[1] *Amount requested should include total for salary and benefits.*
[2] *Travel reimbursement rates are the same as similarly situated state employees.*
[3] *All consultants must be selected pursuant to a bidding and procurement process that complies with all applicable laws.*

Task 5 – Floodplain Ordinance Update	**$22,191.91**	**$2,008.09**	**$24,200**
Total	**$224,340.00**	**$20,300.00**	**$244,640**
Total Direct Costs	**$224,340.00**	**$23,500.00**	**$247,840**
OVERHEAD/INDIRECT COSTS[4]			
Total County/City Staff Overhead/Indirect Costs	**$0**	**$6,000**	**$6,000**
TOTAL PROJECT COST	**$224,340.00**	**$100,000.00**	**$324,340**

[4] *Indirect costs include, for example, a pro rata share of rent, utilities, and salaries for certain positions indirectly supporting the proposed project but not directly staffing it. Amount requested for indirect costs should be capped at 10% of amount requested for "Total Labor."*

RESOLUTION NO. 2019-56

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUNTINGTON BEACH AUTHORIZING SUBMITTAL OF AN APPLICATION FOR A CALIFORNIA COASTAL COMMISSION LCP PLANNING GRANT

WHEREAS, the Budget Act of 2018 and 2019, respectively, provide $1,500,000 for Coastal Commission grants to local governments to support Local Coastal Program (LCP) planning that results in the reduction of greenhouse gas emissions and adaptation to the impacts of climate change; and

The California Coastal Commission, under the authority of the California Coastal Act, may provide financial assistance to support coastal planning and has approved a competitive grant program to provide such financial assistance for LCP planning; and

The goal of the grant program is to develop new or updated LCPs in conformance with the California Coastal Act and to reflect current circumstances and new scientific information, including especially new understandings and concern for the effects of climate change; and

Grant proposals submitted under this grant program must complete Local Coastal Program (LCP) planning work with special emphasis on reducing greenhouse gases and addressing the effects of climate change and sea-level rise; and

The City of Huntington Beach has an effectively certified LCP; and

The City of Huntington Beach desires to pursue a project that would result in the completion and submittal for certification by the California Coastal Commission of an Amendment to the LCP; and

The City of Huntington Beach commits to and agrees to fully support a planning effort intended to amend a certified LCP pursuant to the provisions of the California Coastal Act, with full public participation and coordination with the Coastal Commission staff.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Huntington Beach, hereby:

1. Directs the City Manager or his designee to submit the grant application package attached hereto as Attachment 1 to the California Coastal Commission to provide financial and planning assistance, under authority of the California Coastal Act, in the amount of up to $300,000 to fund the project more particularly described in the grant application package.

2. Authorizes the City Manager or his designee of the City of Huntington Beach, to execute, in the name of the City of Huntington Beach all necessary applications, contracts and agreements and amendments thereto to implement and carry out the grant application package attached hereto and any project approved through approval of the grant application.

PASSED AND ADOPTED by the City Council of the City of Huntington Beach at a regular meeting thereof held on the 19th day of August, 2019.

Mayor

REVIEWED AND APPROVED:

Interim City Manager

INITIATED AND APPROVED:

Interim City Manager

APPROVED AS TO FORM:

City Attorney

Res. No. 2019-56

STATE OF CALIFORNIA
COUNTY OF ORANGE) ss:
CITY OF HUNTINGTON BEACH)

I, ROBIN ESTANISLAU, the duly elected, qualified City Clerk of the City of Huntington Beach, and ex-officio Clerk of the City Council of said City, do hereby certify that the whole number of members of the City Council of the City of Huntington Beach is seven; that the foregoing resolution was passed and adopted by the affirmative vote of at least a majority of all the members of said City Council at a **Regular** meeting thereof held on **August 19, 2019** by the following vote:

AYES: Brenden, Carr, Semeta, Peterson, Posey, Hardy
NOES: None
ABSENT: Delgleize
RECUSE: None

Robin Estanislau
City Clerk and ex-officio Clerk of the
City Council of the City of
Huntington Beach, California

CALIFORNIA COASTAL COMMISSION LCP PLANNING GRANT APPLICATION APPENDIX

The City of Huntington Beach has provided the following Appendices to complement its grant application for the 2019 Local Coastal Program Planning Grant.

Appendix 1: Priority Populations Map …….Page A2

Appendix 2: Aerial Photographs of the City's Coastal Zone, Sequenced from North to South

Image 1: Northern Coastal Area (Huntington Harbour and Sunset Beach)……Page A3

Image 2: Central Coast Area (Bolsa Chica Wetlands and Oil Fields) ……...Page A3

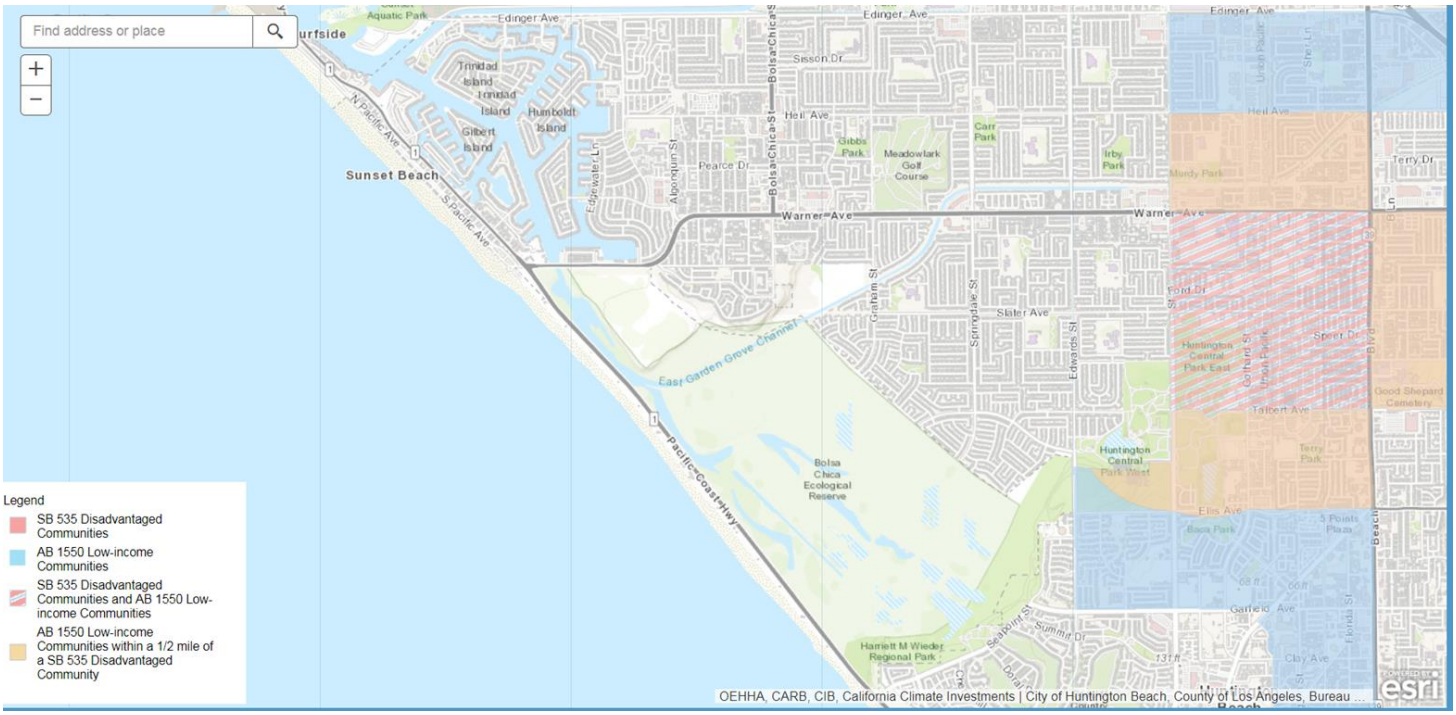
Image 3: Municipal Pier Area (Downtown)……..Page A4

Image 4: Southern Coastal Area (Wetlands and Industrial Facilities)……Page A4

Appendix 3: 2014 Sea Level Rise Vulnerability Assessment Highlights……Page A5

Appendix 4: Coastal Resiliency Goals Outlined in 2017 General Plan Update…….Page A24

Appendix 1: Priority Populations Map



Appendix 1: AB 1550 Disadvantaged Communities located in close proximity to Coastal Zone Boundaries (Source: California Air Resources Board Priority Population Maps)

Appendix 2: Aerial Photographs of the City's Coastal Zone, Sequenced from North to South

Image 1: Northern Coastal Area (Huntington Harbour and Sunset Beach)
The northern edge of Huntington Beach's Coastal Zone, looking East. Featured here are the communities of Sunset Beach (along the coast) and Huntington Harbour.

Image 2: Central Coast Area (Bolsa Chica Wetlands and Oil Fields)

The central region of Huntington Beach's Coastal Zone, looking northwest. The foreground shows the active Oxy USA Oil Field along Pacific Coast Highway. Inland and adjacent to the oil field is the Huntington Bluffs/Seacliff Development. The Bolsa Chica Wetlands appear in the background.

Image 3: Municipal Pier Area (Downtown)
The popular municipal pier and Downtown region of Huntington Beach's Coastal Zone, looking north. This region contains several of the City's Historical and Cultural landmarks.

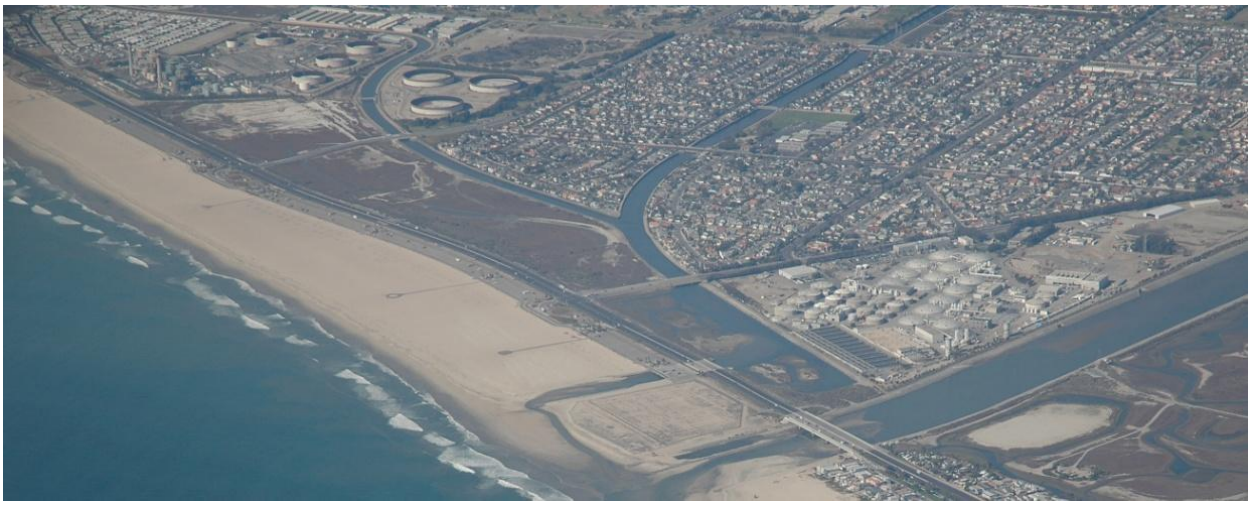
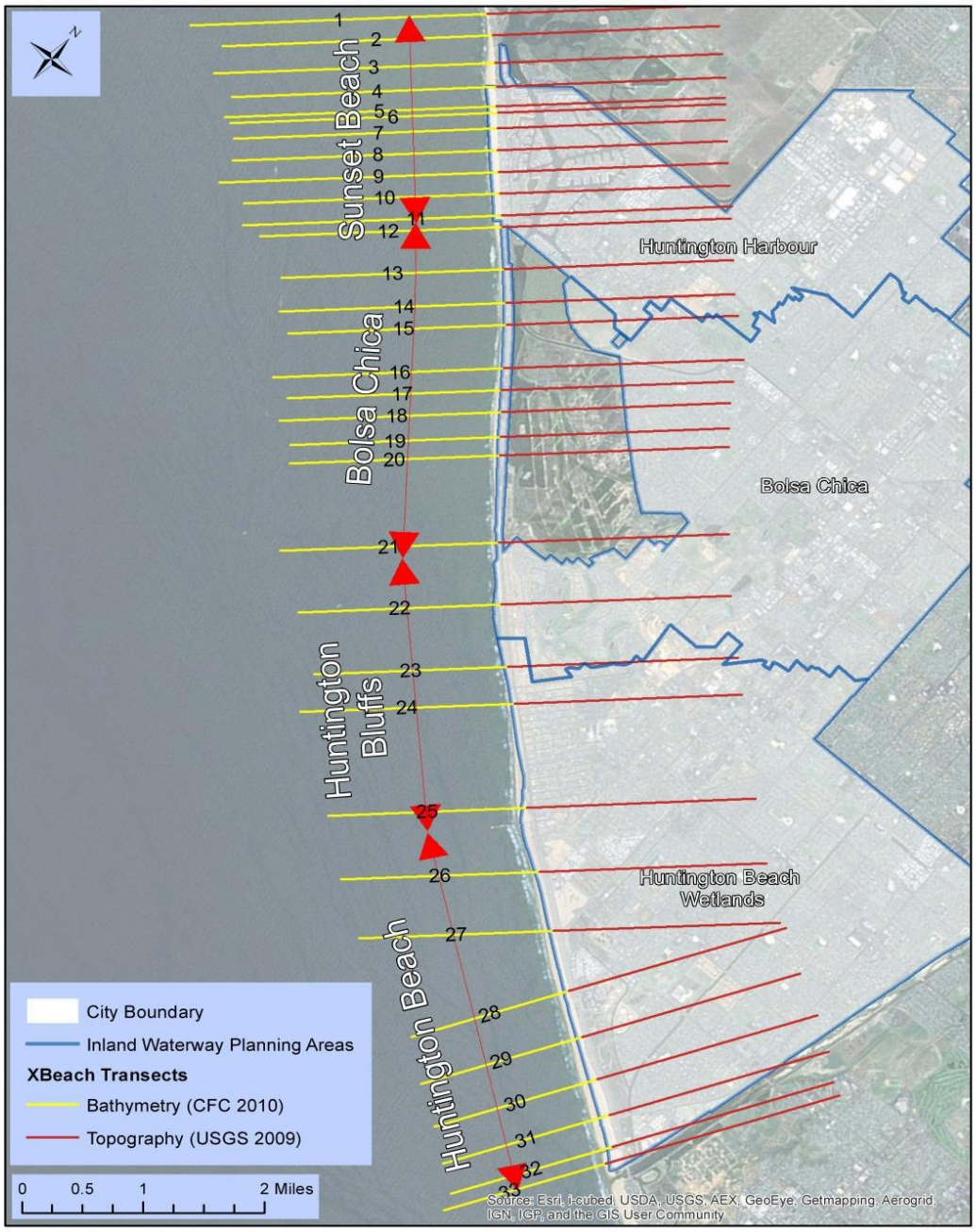


Image 4: Southern Coastal Area (Wetlands and Industrial Facilities)
The southern edge of Huntington Beach's Coastal Zone, looking north. Featured in the foreground are the Orange County Sanitation District Facility (adjacent to the Santa Ana River) and the Huntington Beach Wetlands, which extend along Pacific Coast Highway. A fenced sanctuary habitat for Least Terns is visible seaward of Pacific Coast Highway. In the background, the AES Generating Station can be seen between Pacific Coast Highway and a City Flood Channel.

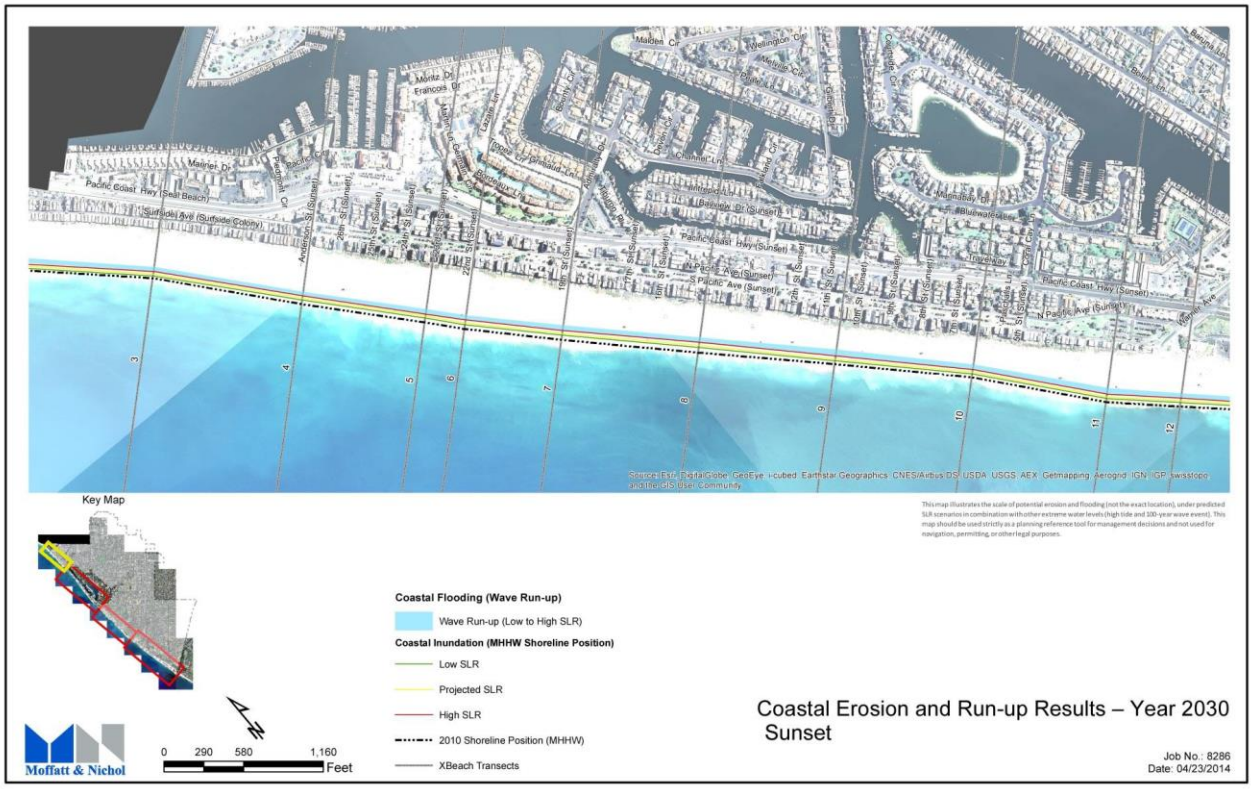
Appendix 3: 2014 Sea Level Rise Vulnerability Assessment Highlights

The images below are excerpts from the Sea Level Rise Vulnerability Assessment that highlight and summarize the findings of the study. The full assessment can be found at the following link: https://www.huntingtonbeachca.gov/files/users/planning/Volume-IIII-Appendix-P-SeaLevelRiseVulnerabilityAssessment.pdf

Shoreline Planning Areas and Inland Waterway Planning Areas:

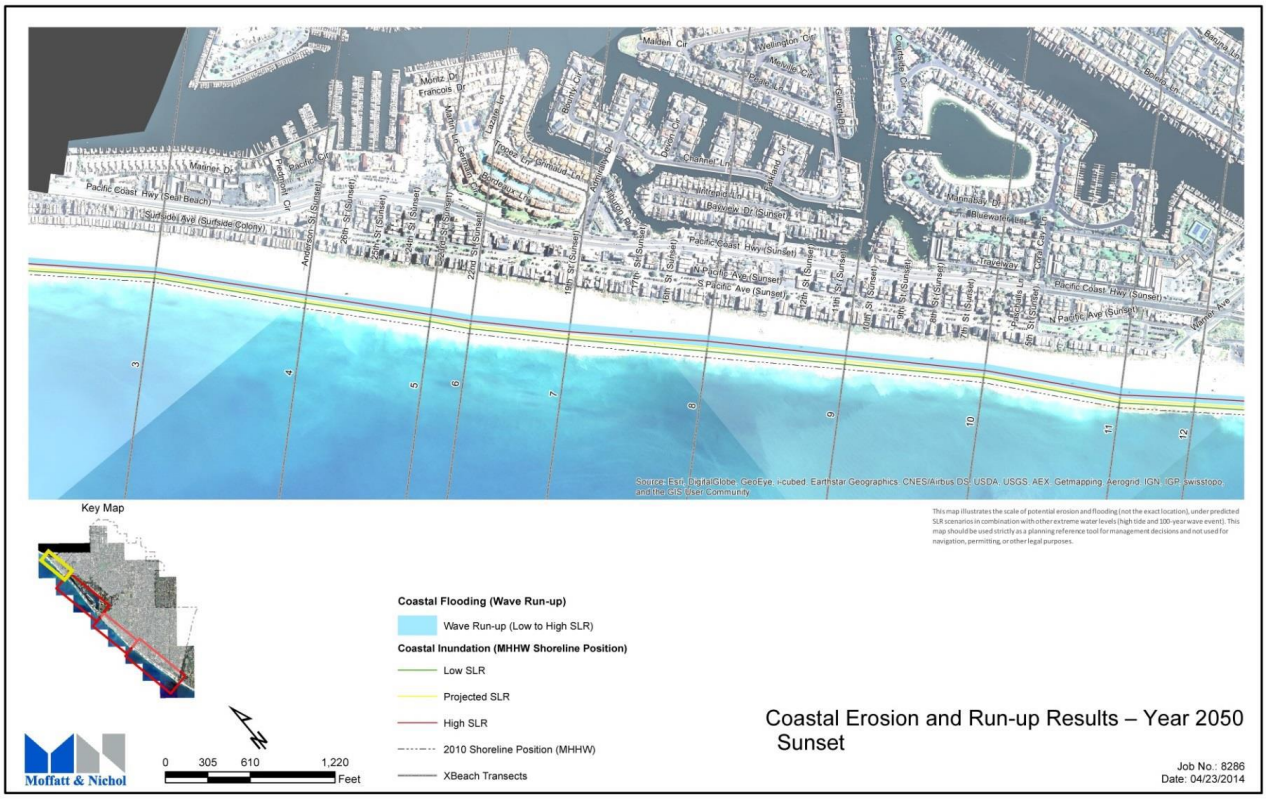


Sunset Beach Shoreline Planning Area Year 2030:



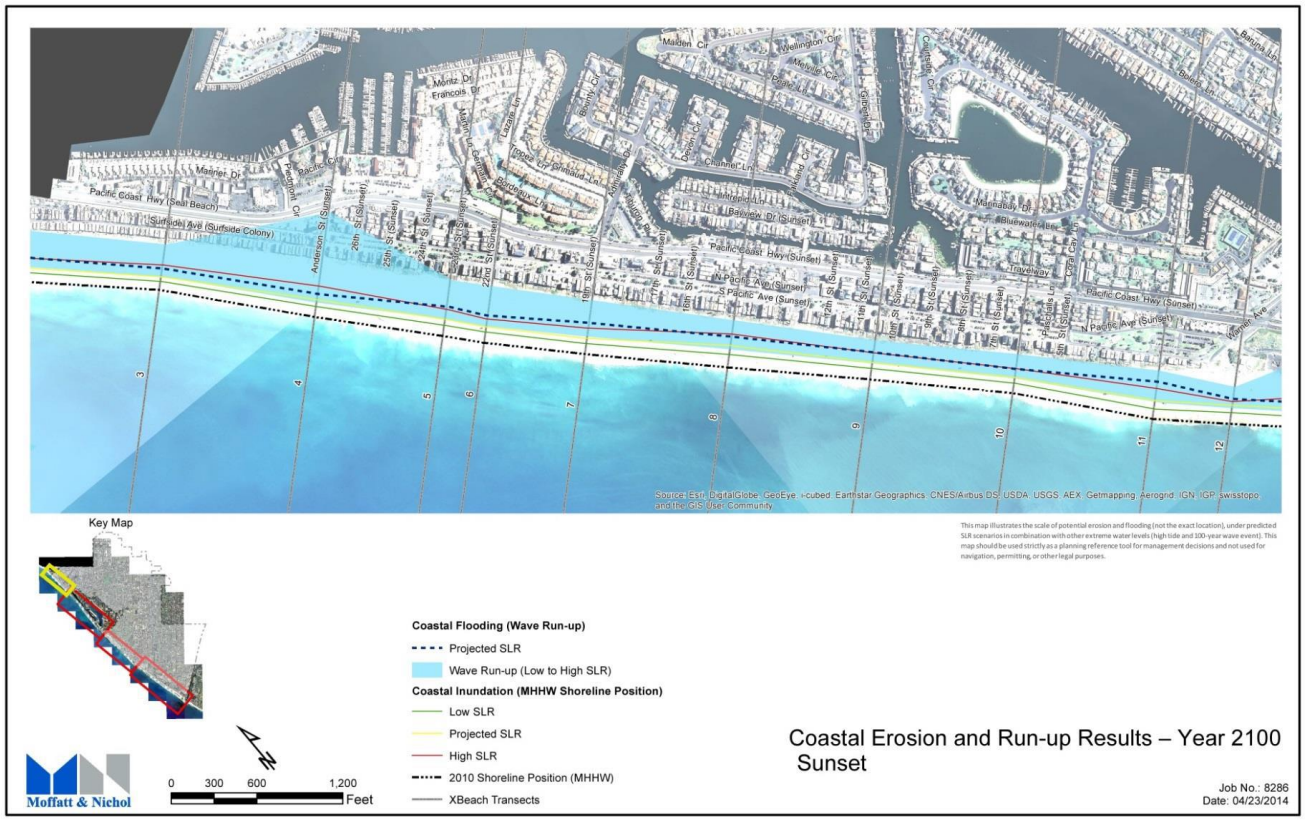
The image above illustrates coastal erosion and run-up results for the year 2030

Sunset Beach Shoreline Planning Area Year 2050:



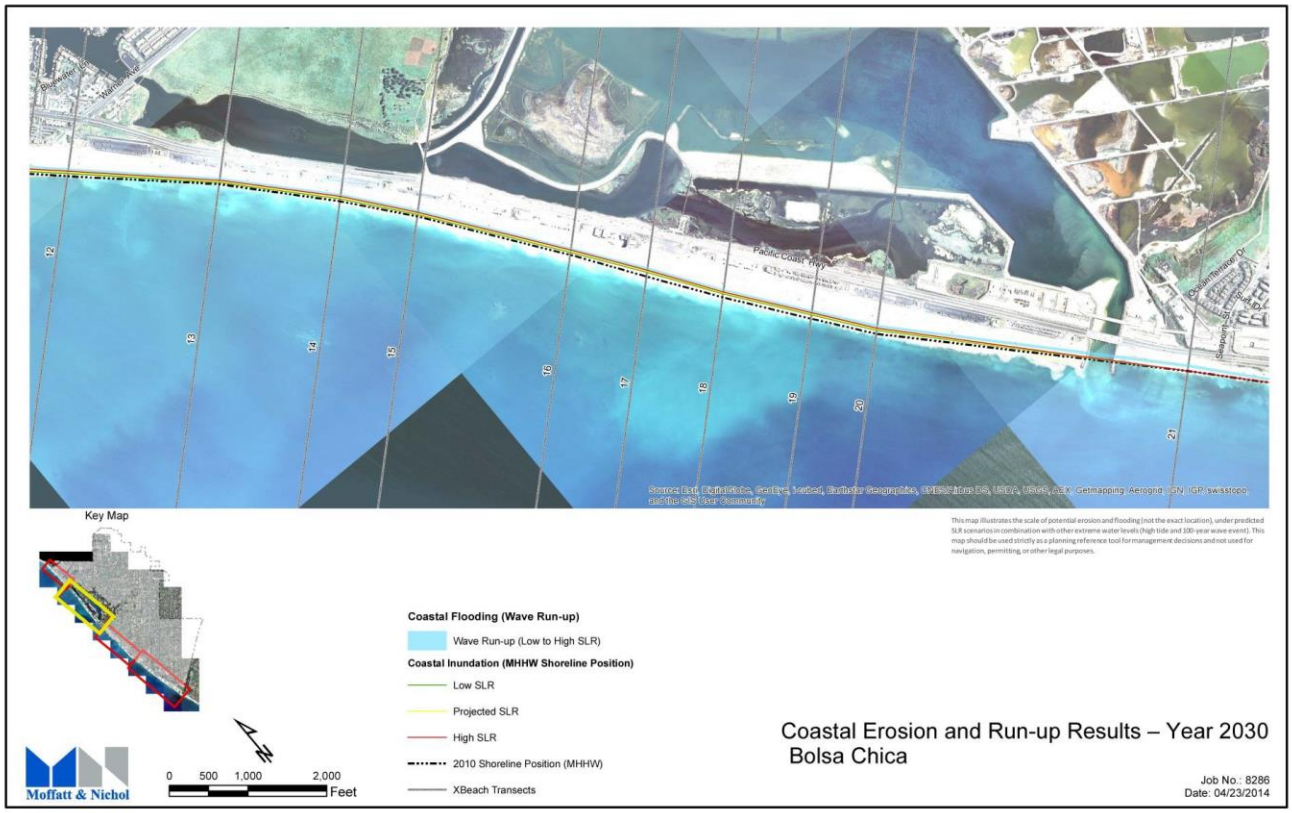
The image above illustrates coastal erosion and run-up results for the year 2050

Sunset Beach Shoreline Planning Area Year 2100:



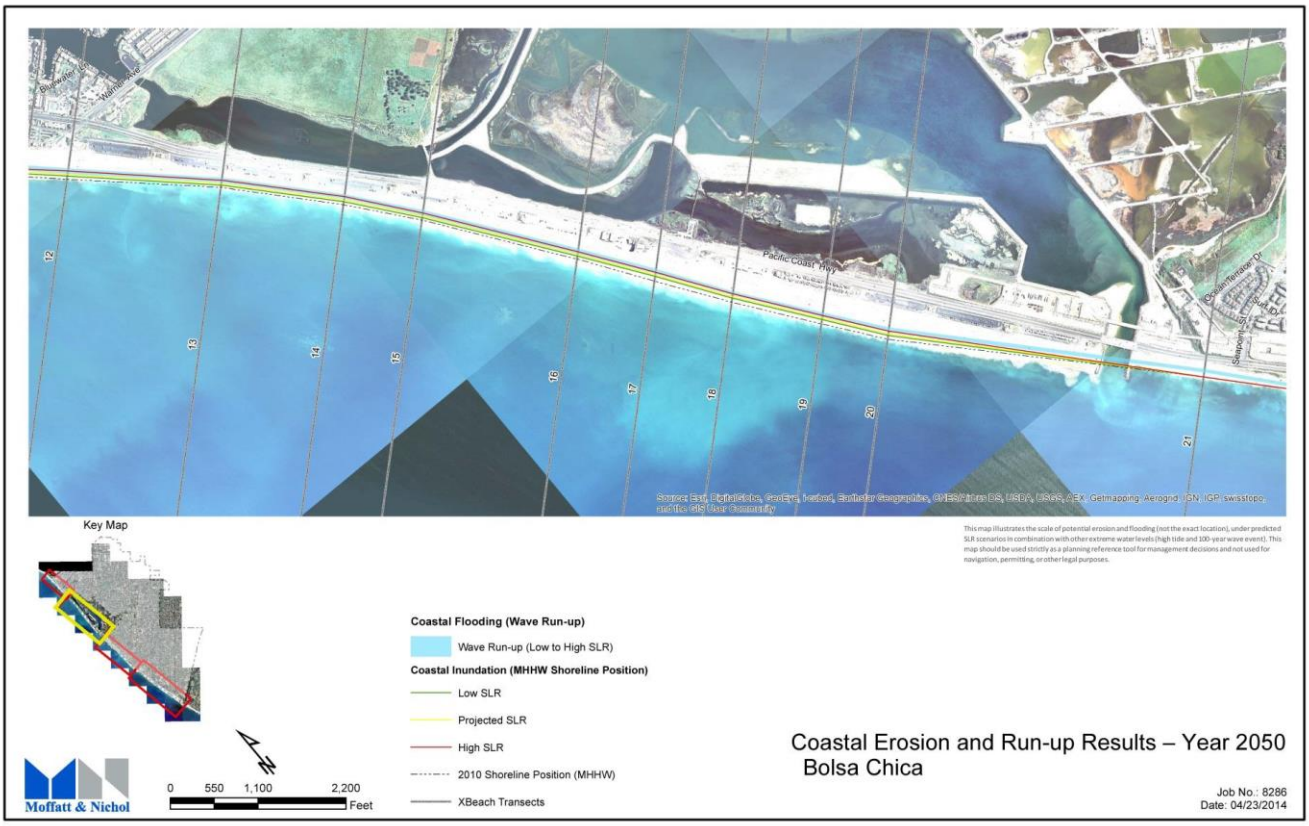
The image above illustrates coastal erosion and run-up results for the year 2100

Bolsa Chica Shoreline Planning Area Year 2030:



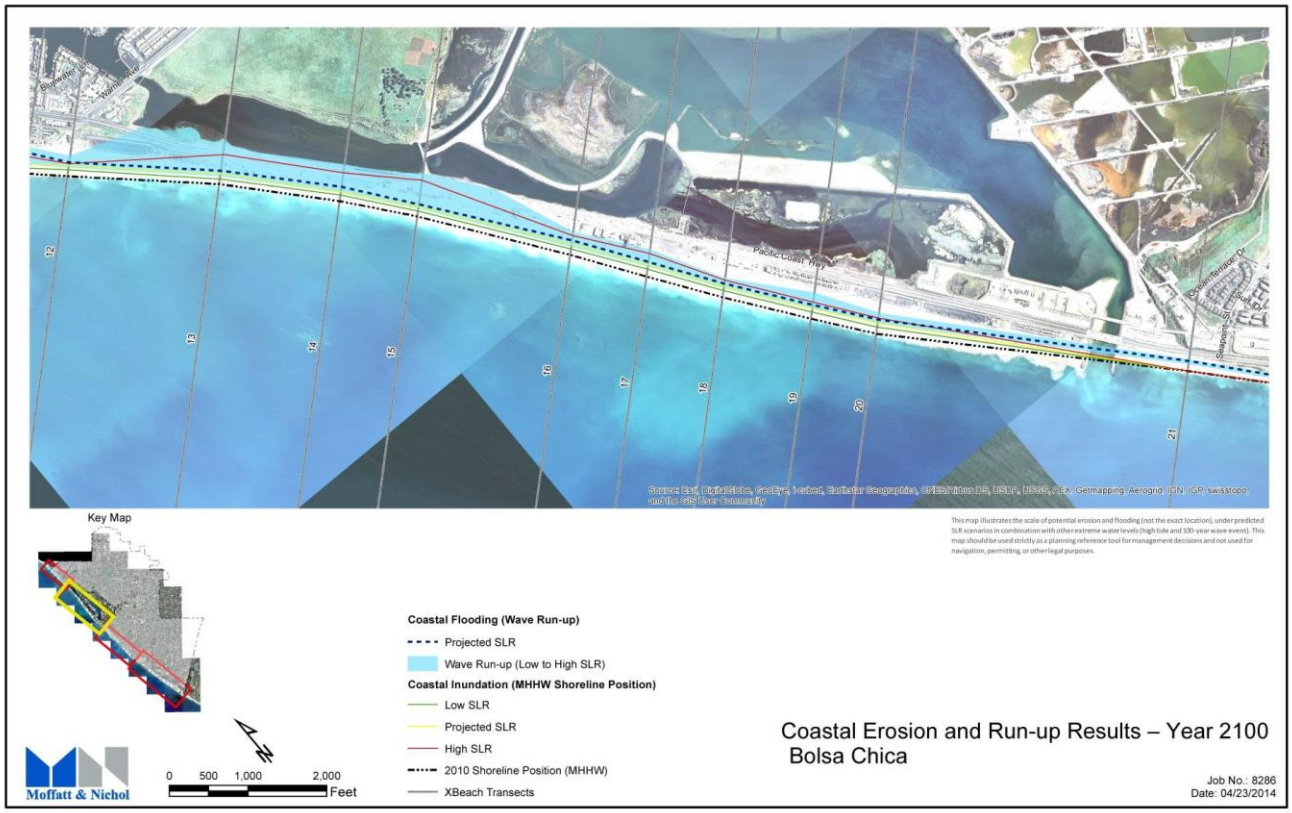
The image above illustrates coastal erosion and run-up results for the year 2030

Bolsa Chica Shoreline Planning Area Year 2050:



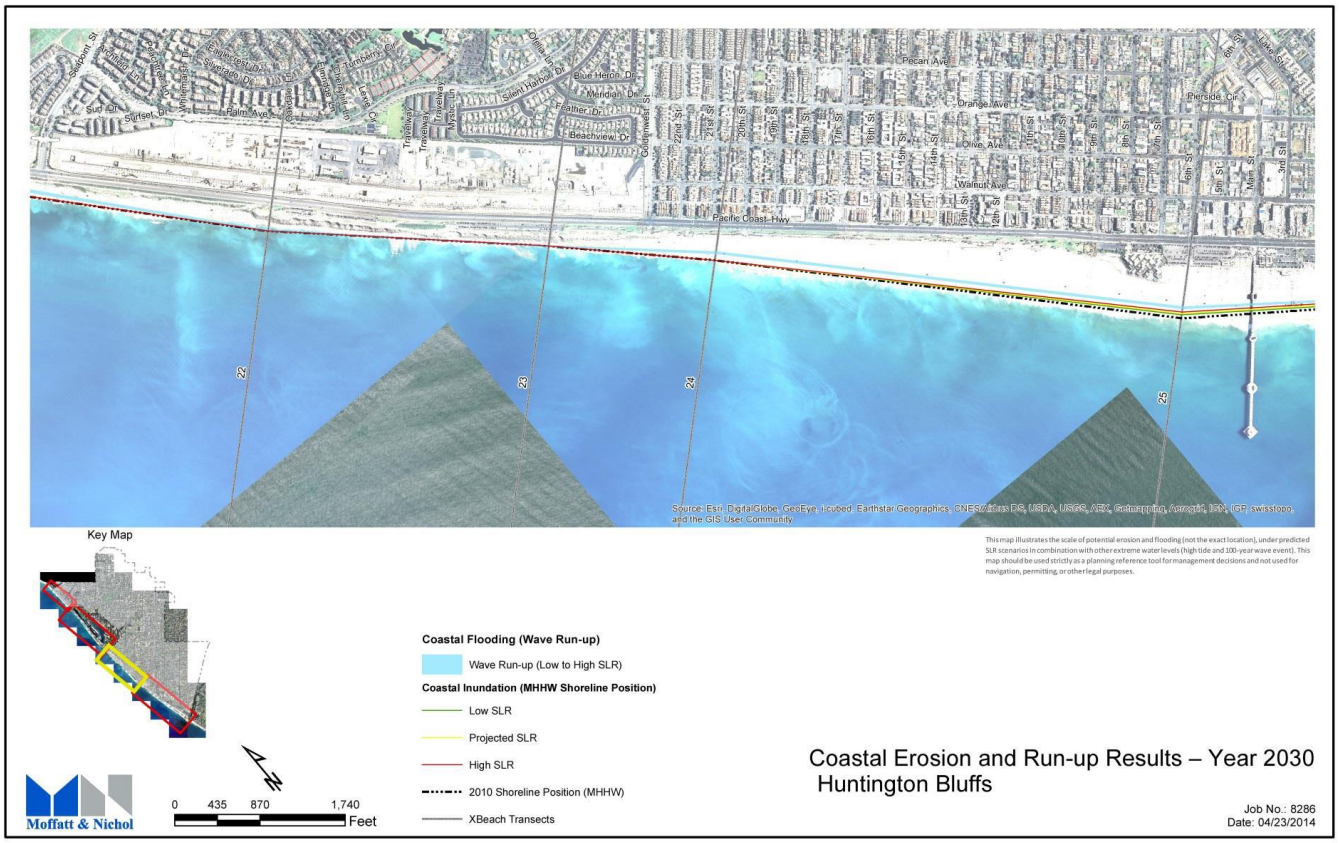
The image above illustrates coastal erosion and run-up results for the year 2050

Bolsa Chica Shoreline Planning Area Year 2100:



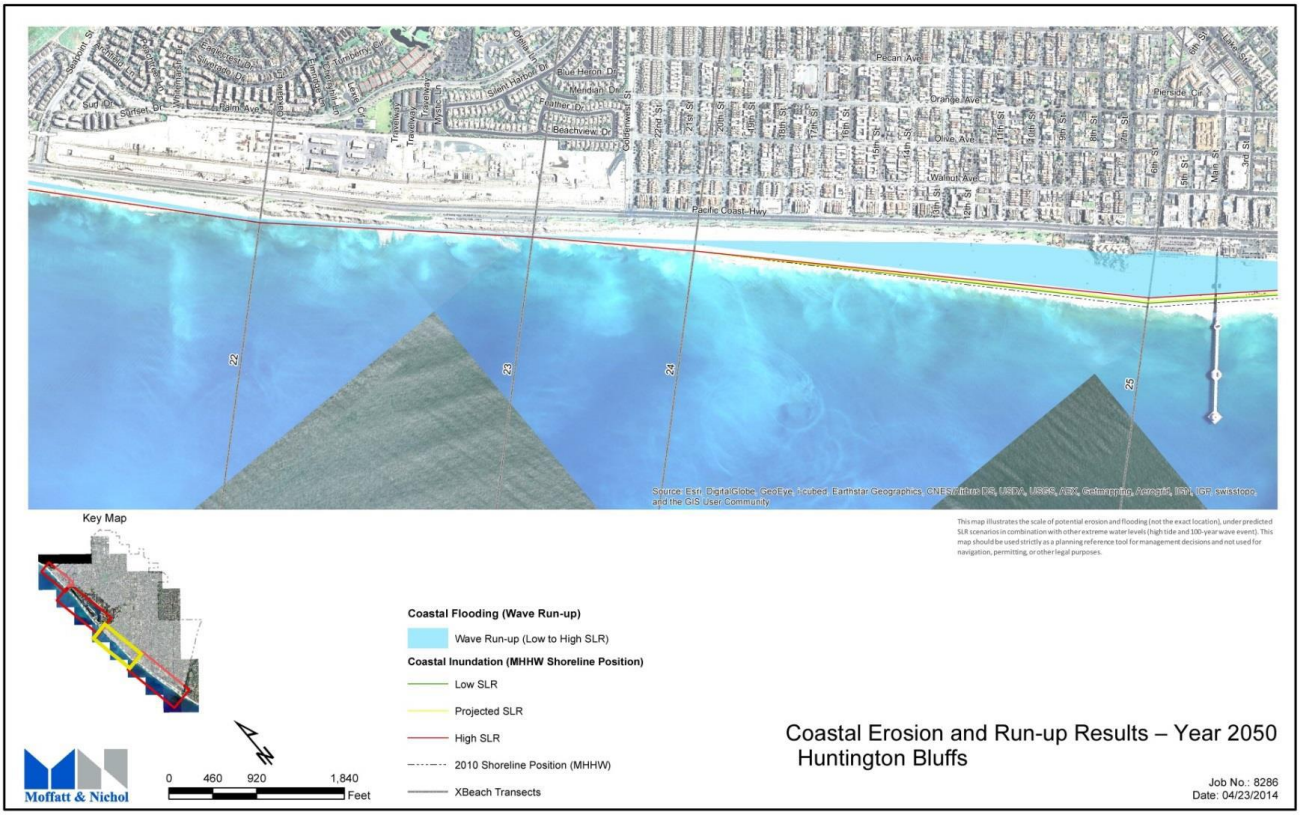
The image above illustrates coastal erosion and run-up results for the year 2100

Huntington Bluffs Shoreline Planning Area Year 2030:



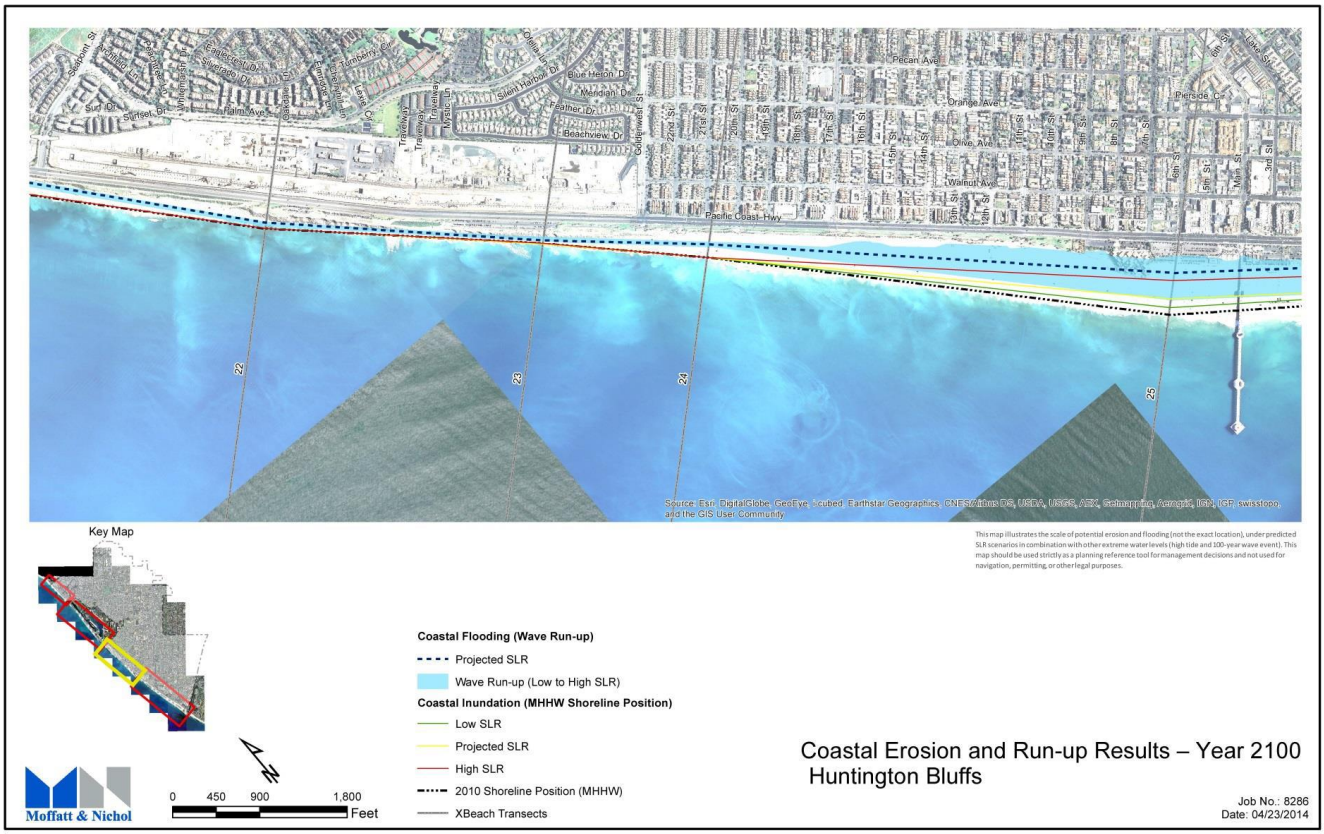
The image above illustrates coastal erosion and run-up results for the year 2030

Huntington Bluffs Shoreline Planning Area Year 2050:



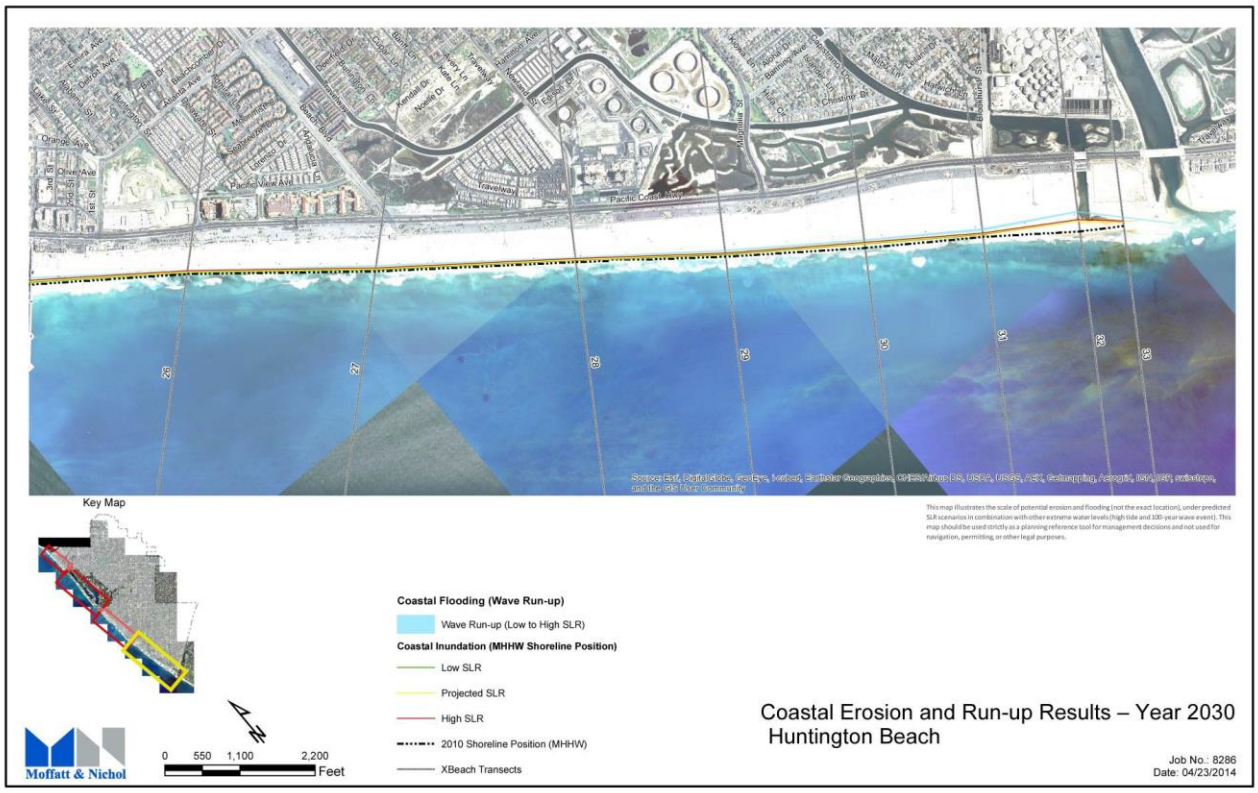
The image above illustrates coastal erosion and run-up results for the year 2050

Huntington Bluffs Shoreline Planning Area Year 2100:



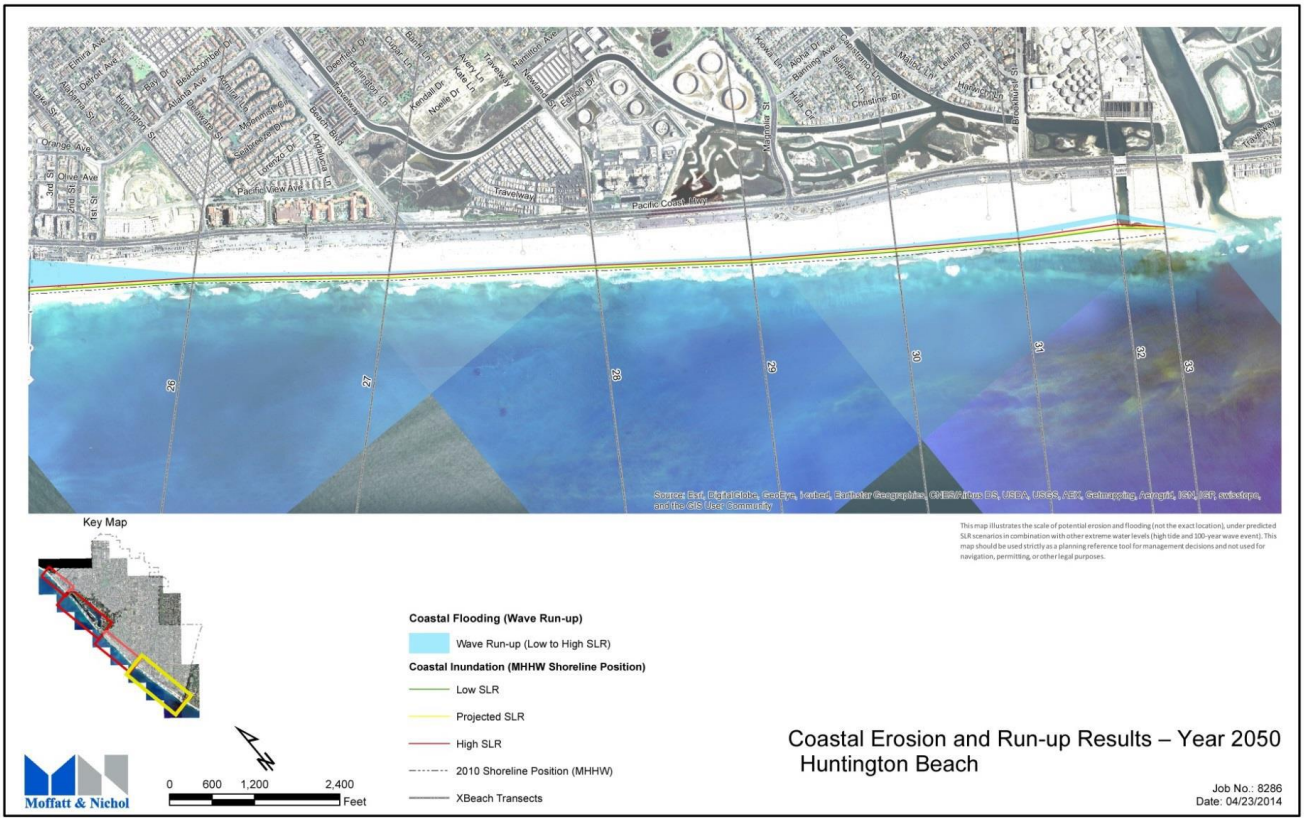
The image above illustrates coastal erosion and run-up results for the year 2100

Huntington Beach Shoreline Planning Area Year 2030:



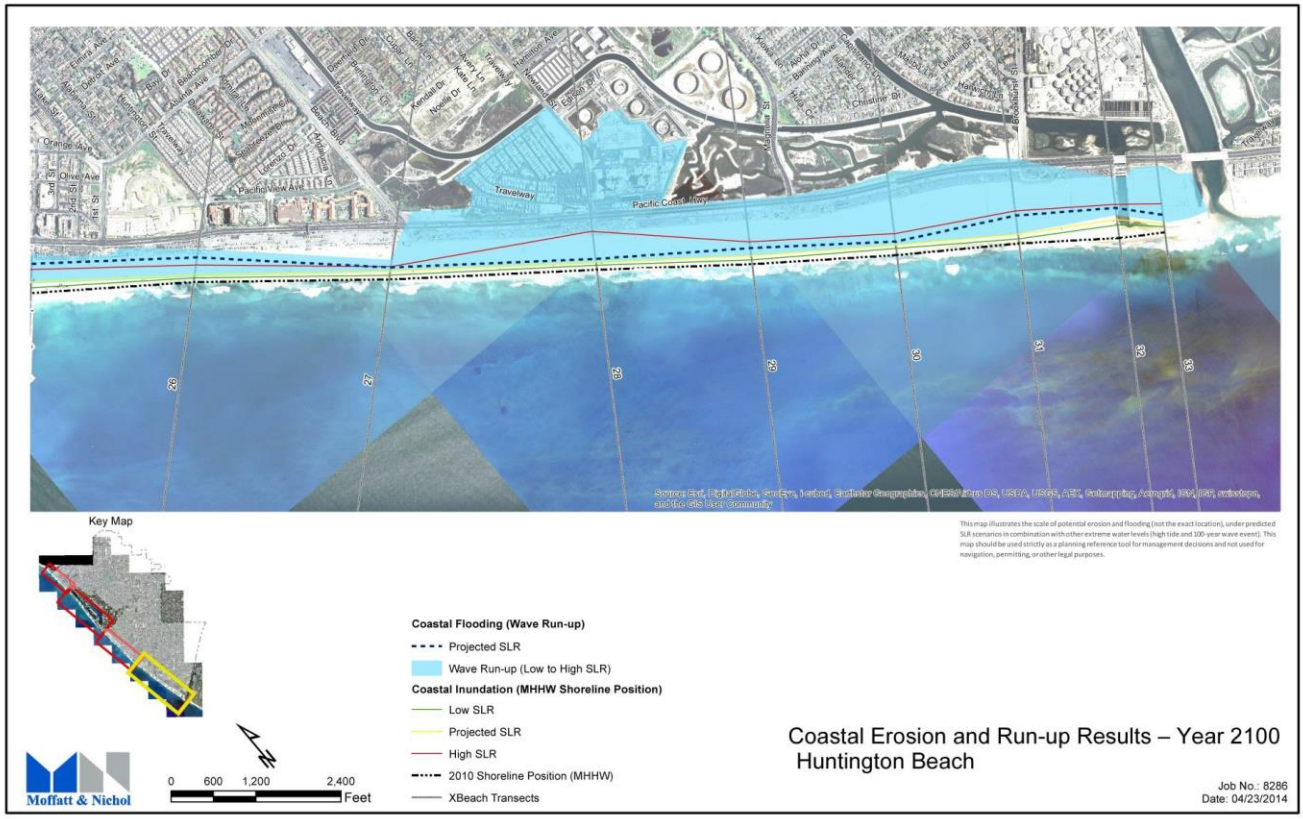
The image above illustrates coastal erosion and run-up results for the year 2030

Huntington Beach Shoreline Planning Area Year 2050:



The image above illustrates coastal erosion and run-up results for the year 2050

Huntington Beach Shoreline Planning Area Year 2100:

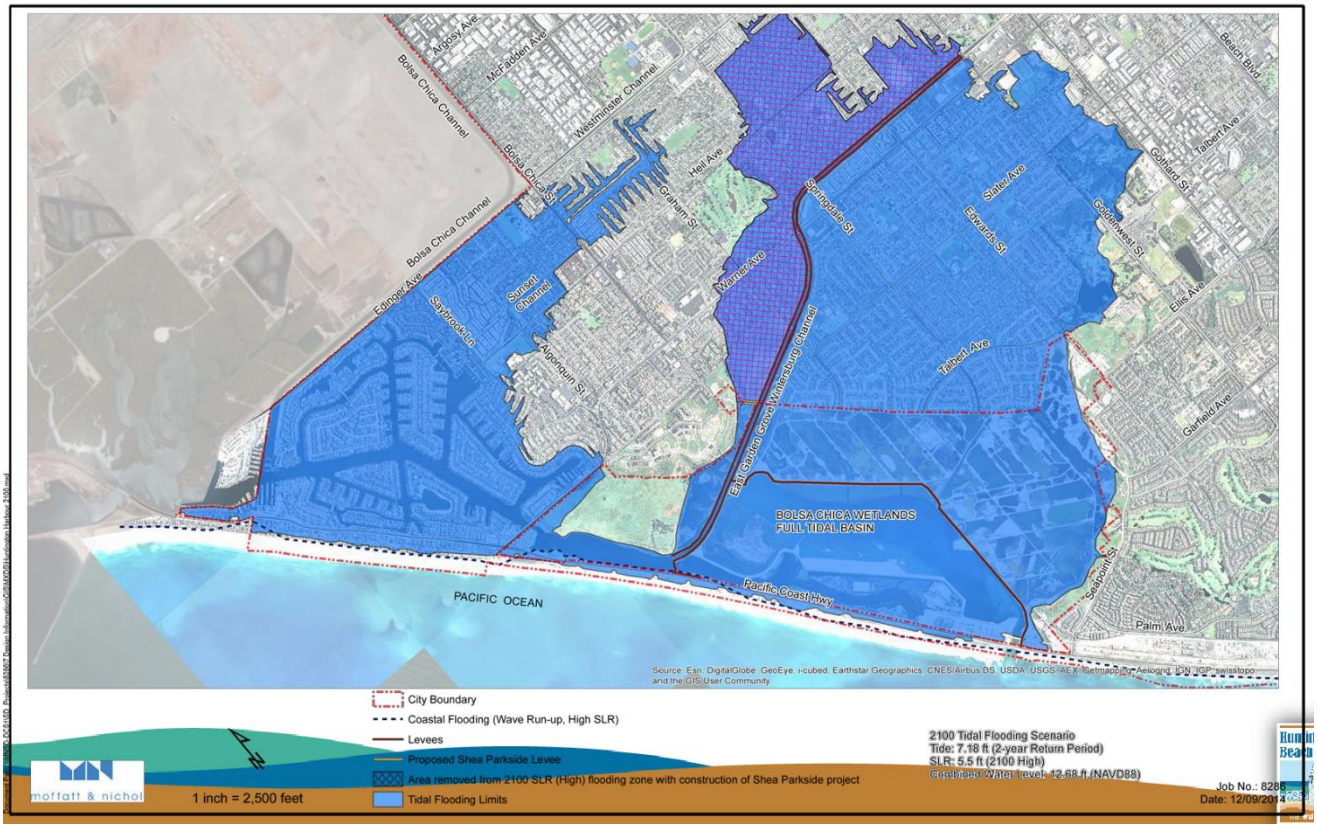


The image above illustrates coastal erosion and run-up results for the year 2100

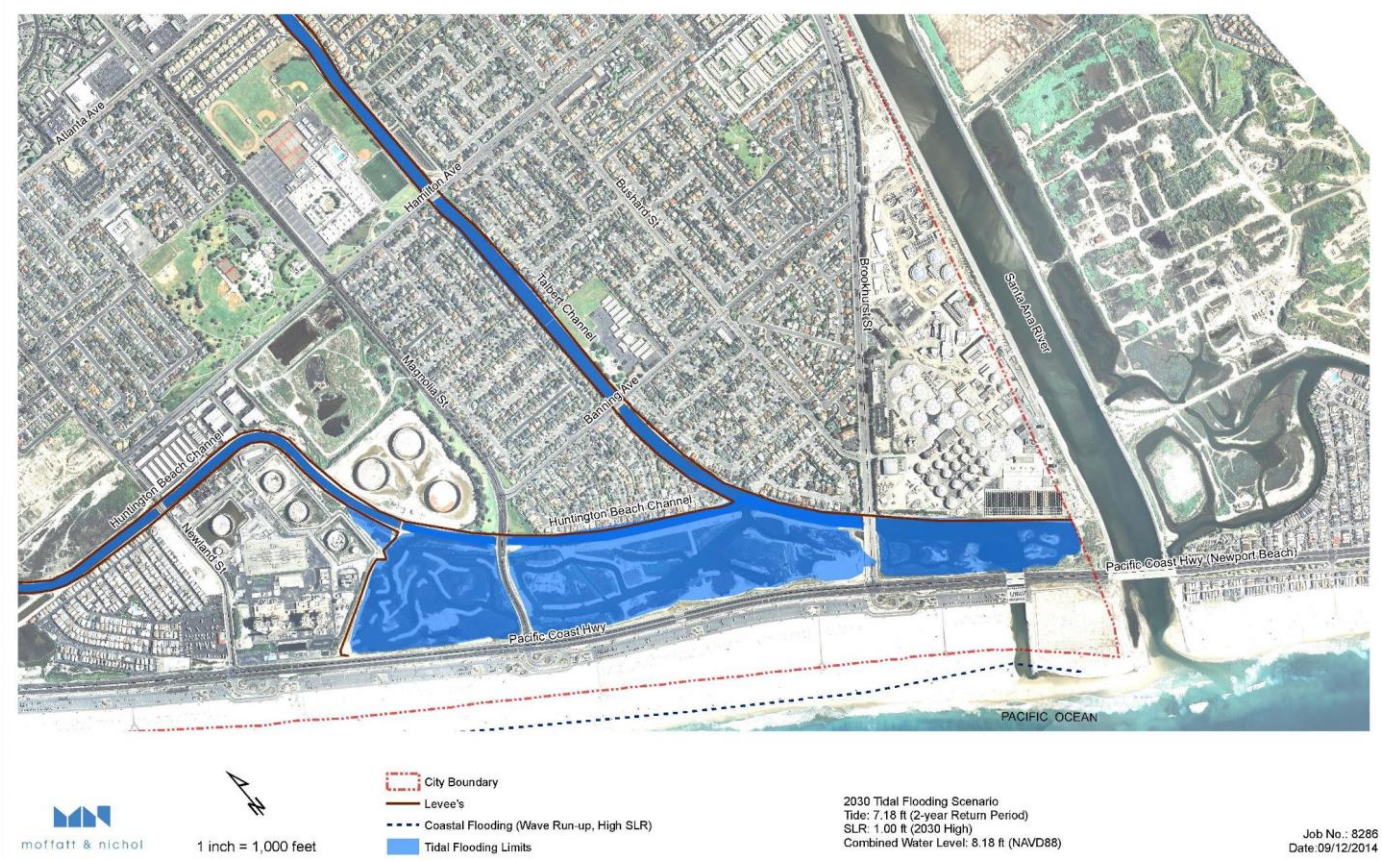
Huntington Harbour Inland Waterway Planning Area Tidal Flooding -Year 2030 (High)

Huntington Harbour Inland Waterway Planning Area Tidal Flooding -Year 2050 (High)

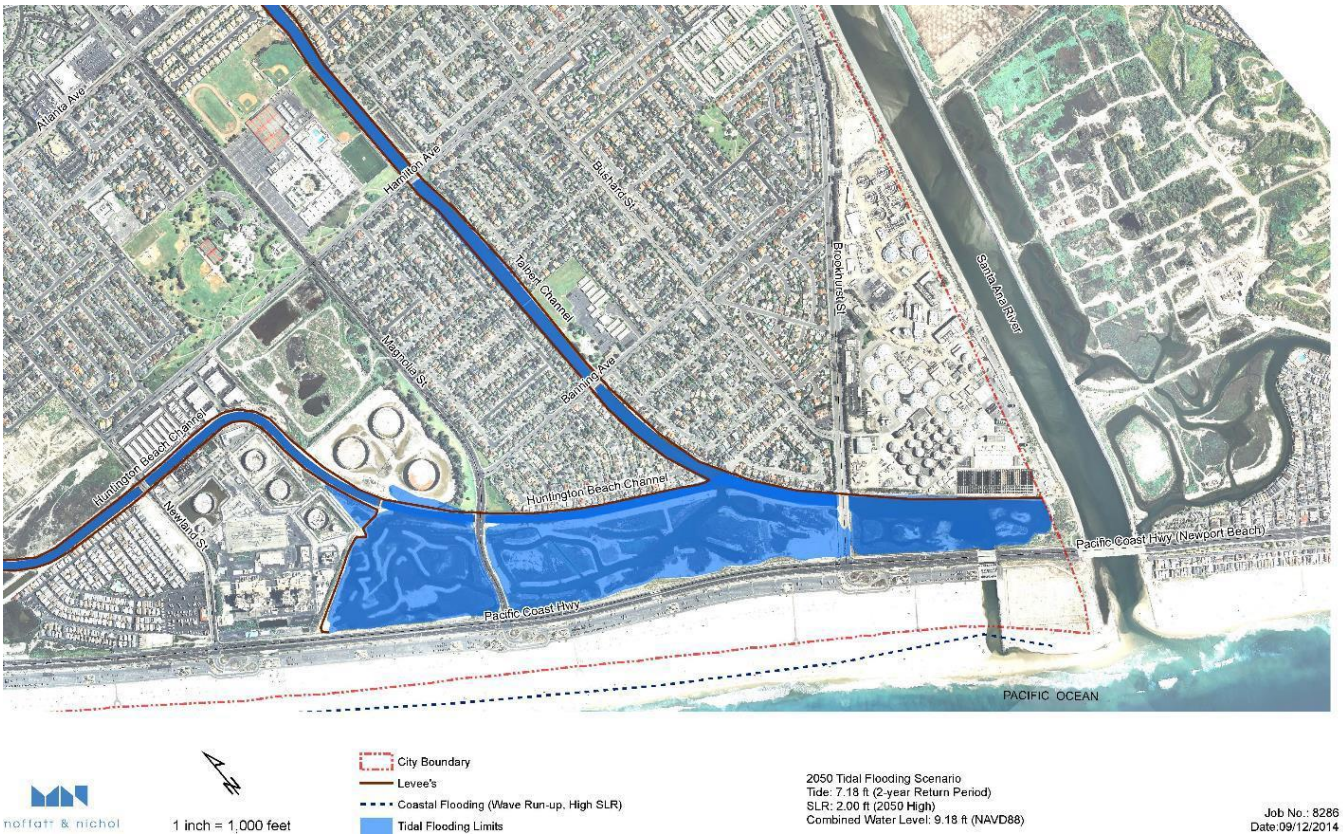
Huntington Harbour Inland Waterway Planning Area Tidal Flooding -Year 2100 (High)



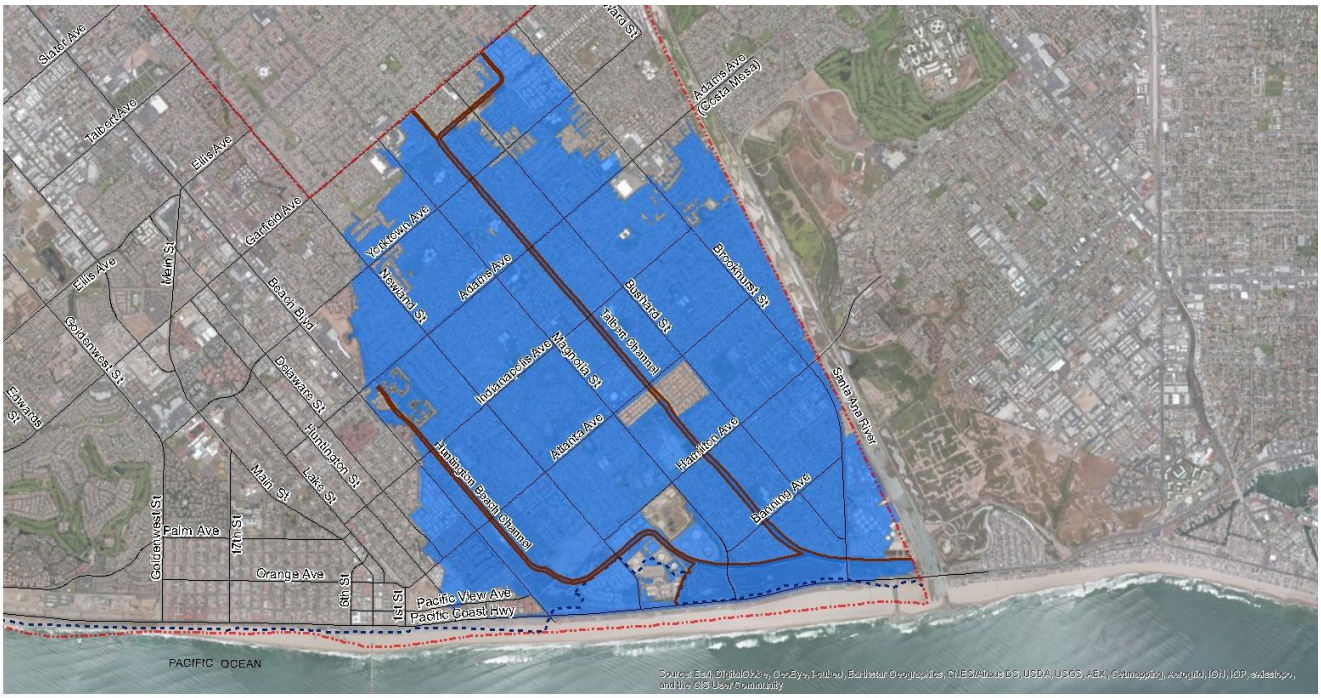
HB Wetlands Inland Waterway Planning Area Tidal Flooding -Year 2030 (SLR High)



HB Wetlands Inland Waterway Planning Area Tidal Flooding -Year 2050 (SLR High)



HB Wetlands Inland Waterway Planning Area Tidal Flooding -Year 2100 (SLR High)



moffatt & nichol

1 inch = 3,000 feet

City Boundary
Levee's
Coastal Flooding (Wave Run-up, High SLR
Tidal Flooding Limits

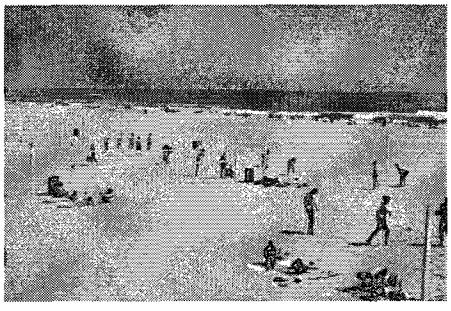
2100 Tidal Flooding Scenario
Tide: 7.18 ft (2-year Return Period)
SLR: 5.5 ft (2100 High)
Combined Water Level: 12.68 ft (NAVD88)

Job No.: 8286
Date:09/25/2014

Greenhouse Gas Emissions released by ICLEI-USA and recommended by the Governor's Office of Planning and Research, the Local Government Operations Protocol, and methodologies approved by the California Air Resources Board, The Climate Registry, and the Association of Environmental Professionals. We anticipate that the inventories will include emissions from key sectors, including energy, transportation, waste, water, wastewater, and other sectors as applicable. We also anticipate coordinating with the City's Energy Program Manager, Southern California Edison, the Southern California Gas Company, and other service providers while preparing the inventories.

Following the inventories, we will forecast GHG emissions to 2020, the General Plan horizon year, and 2050 for consistency with AB 32 guidance from the Governor's Office Planning and Research and the State CEQA Guidelines. Forecasting will allow identification of a 2020 GHG reduction target consistent with AB 32 and provide an opportunity to select an additional GHG reduction target (or targets) consistent with the community's vision for the General Plan and SAP.

Coastal Resiliency



Using state, regional, and local resources, expert understanding, and feedback from local experts, PMC will evaluate resiliency and adaptation strategies and policies to address anticipated climate change effects, particularly those affecting Huntington Beach's coastline. Our approach will include research and assessment of state, regional, and local resources, preparation of a vulnerability assessment, sea level rise–specific analyses, and preparation of adaptation strategies and resiliency measures. Excellent resources are readily available to provide guidance and background information, including:

- California Adaptation Planning Guide (2012, Cal EMA)
- Cal-Adapt Local Profiles (2013, CEC)
- City planning documents including, but not limited to, the draft Local Hazard Mitigation Plan, demographic projections, Infrastructure Master Plans, and the Emergency Management Plan
- Project-specific technical SLR analysis (presented below)
- Cal EMA My Hazard Mapping tool

Sea Level Rise

The latest State of California guidance for SLR is summarized in the State of California Sea-Level Rise Guidance Document (March 2013 update), which was based on the final report from the National Research Council (NRC), Sea Level Rise for the Coasts of California, Oregon and Washington (June 2012).

The diagrams below show the past and future tide levels for the Los Angeles tide gauge (the longest record in the region). The future tide levels are based on the NRC III SLR scenario. Similar analysis can be performed for any SLR scenario. With additional analysis, similar results can be developed that show how return periods for various tide levels change over time. Essentially, what is a 100-year tide level today will be less than a 5-year event by 2060 under this scenario. Such information is very important for a broad range of City infrastructure elements.

Figure 1.1. Tide Gauge Analysis for the Port of Los Angeles Gauge

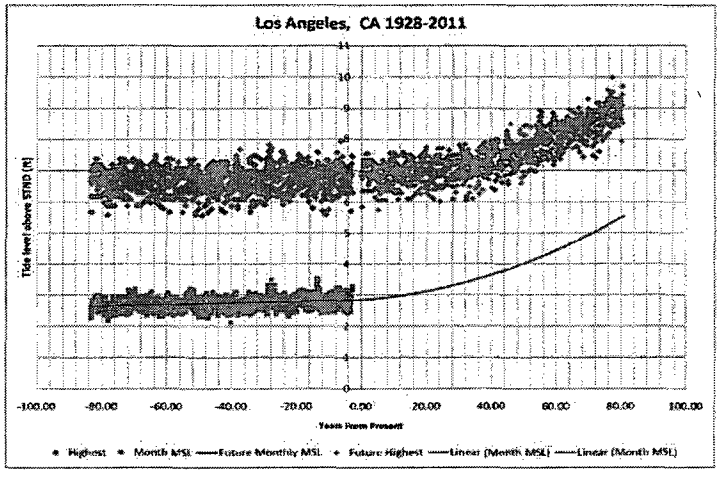
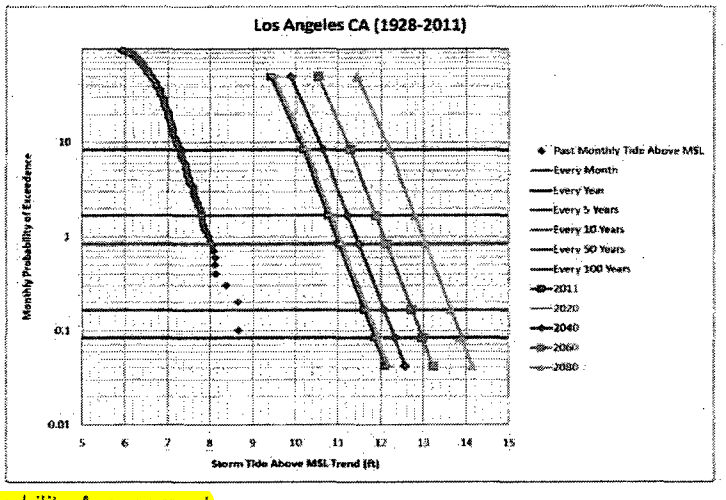


Figure 1.2. Probability of Tides Exceeding Mean Sea Level

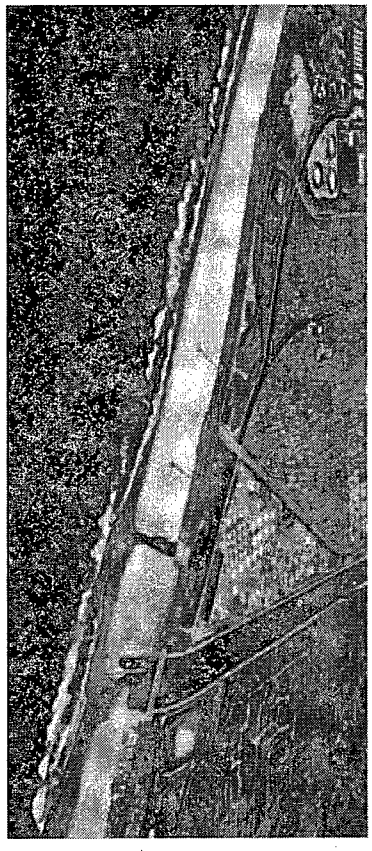


Vulnerability Assessment

In order to understand the city's vulnerability, it will be important to involve organizations that manage resources and facilities to identify risks and strategies to reduce risks. Because the number of groups and organizations that are affected by climate change is large, we recommend forming a task force made up of

organizations actively engaged in the management of resources and facilities. The task force could also include representatives of the GPAC, at the City's discretion.

A vulnerability assessment is critical to identify adaptation strategies that effectively increase resiliency to hazards and a changing climate over time. The vulnerability assessment provides a spatial assessment of (1) the exposure to hazards, (2) sensitivity to effects, (3) potential effects of those hazards (including certainty and timing), and (4) the current ability to adapt to those effects.



Exposure. The first step in assessing climate change vulnerability is identifying exposure, or which climate change effects will occur in the city. Early analysis from the California Adaptation Planning Guide suggests the following primary exposure:

- Sea level rise – up to 55-inch sea level rise by 2100
- Extreme heat – 3 to 5 more annual heat waves by 2050; 12 to 14 by 2100
- Increases in average annual temperature and the number of extreme heat days
- Changes in precipitation patterns (increase in extreme events and drought) – up to 2-inch decrease by 2050, 3- to 5-inch decrease by 2090
- Increases in average annual temperature and the number of extreme heat days

PMC and M&N will build from this initial analysis using existing resources, technical expertise, discussions with City staff, and input from local stakeholders. Exposure will be assessed in terms of expected severity and likelihood.

Sensitivity. The second step in the process is identifying the functions, structures, and populations that will be affected by the exposures listed above. Given the extensive resources already available for Huntington Beach, this task will utilize a sensitivity checklist to determine the degree to which a system would be impaired by climate change effects for each exposure. Through discussions with City staff and the local steering committee and further research, the sensitivity rankings will be refined to identify the most vulnerable systems, infrastructure, and communities.

Effects. Climate change effects occur at the intersection of exposure and sensitivity. PMC will identify specific impacts such as flooding (from anticipated changes in sea level and/or precipitation), negative public health outcomes from heat-related events, damage to infrastructure and homes due to flooding and reduced water availability, and economic changes resulting from anticipated changes to natural resources that support tourism. These effects will be assessed for severity, certainty, and onset (time frame).

Adaptive Capacity. The City has existing policies, plans, programs, resources, or institutions that will help functions, structures, and populations adapt to climate change. PMC will work with City staff and a local steering committee to identify the ability of a function; structure, or community to maintain its functions while experiencing the effects of climate change. This task will identify those functions and qualitatively assess their ability to reduce climate change effects to key assets over time.

Vulnerability. Vulnerability is identified by assessing the interaction of exposure, sensitivity, impact, and adaptive capacity. The functions, structures, and communities identified as the most vulnerable will be priority topics for adaptation policy. After conducting initial analysis for each of the steps, PMC will perform a series of qualitative assessments, as illustrated in the diagram below, to identify vulnerability. PMC's assessment will be vetted and refined by input from outreach events, discussion with City staff, expert analysis, and the task force.

Figure 1.3. Vulnerability Matrix

	Low Adaptive Capacity	Medium Adaptive Capacity	High Adaptive Capacity
High Impact	High Vulnerability	High Vulnerability	Medium Vulnerability
Medium Impact	High Vulnerability	Medium Vulnerability	Low Vulnerability
Low Impact	Medium Vulnerability	Low Vulnerability	Low Vulnerability

Through the vulnerability assessment, PMC will work with City staff and stakeholders to identify the most vulnerable functions, structures, and communities and to identify adaptation strategies (policies and implementation actions) to ensure these assets adapt to and are resilient in a changing climate. These strategies will include opportunistic (e.g., relocating assets through land use changes), defensive (e.g., protecting assets with infrastructure improvements when they are not easily moved), and passive (e.g., investment in education or social infrastructure to encourage community resiliency) approaches.

Following the vulnerability assessment, we will prepare an adaptation and resiliency strategy. Early analysis based on the risk of the impact (likelihood and potential consequences) and the extent of the City's jurisdiction or influence over the affected system suggests the following primary effects should be evaluated:

- Threats to built infrastructure in the coastal zone from sea level rise
- Threats to coastal ecosystems from sea level rise
- Public health threats from increased temperatures
- Water supply effects

PMC will build from this initial analysis using existing resources, technical expertise, and discussions with City staff and the task force. Exposure risks will be assessed in terms of expected severity and likelihood.

Resource Conservation and Wetland Protection

The City's Coastal Element was comprehensively updated in 2001. It includes an exhibit of "environmentally sensitive habitats as depicted by the Department of Fish and Game" that is based on information from the 1970s and only includes the southeast portion of the city. As part of the General Plan update, PMC will conduct a biological survey to update exhibits that consider such natural resources. The majority of sensitive habitats are along the coast; however, there is one created wetland inland in the Seacliff community, and there are other areas that may warrant recognition, such as the eucalyptus grove at Norma Gibbs Park created for monarch butterflies. In addition, the City is studying the annexation of the unincorporated Bolsa Chica Wetlands and surrounding vicinity, totaling about 1,500 acres, for the purpose of ensuring long-term protection and restoration of the area.

Urban Runoff and Low Impact Development

Identifying opportunities for appropriate drainage control and runoff improvement opportunities will be performed collectively between the consultant team, City staff, and the local community. Moffatt & Nichol will develop a Citywide Urban Runoff Management Plan (CURMP) that will detail how Huntington Beach plans to protect and improve water quality of local coastal resources. Moffatt & Nichol's extensive experience in the city will allow for the easy identification of areas in need of special attention. Moffatt & Nichol will work with City staff to develop a program rooted in sustainable solutions that focus on eliminating additional flow, maximizing on-site retention/infiltration, and incorporating bio-retention features which offer opportunities for runoff treatment and enhancement of local landscaping. As detailed in Section 2, Moffat & Nichol will complete an extensive research program properly documenting existing conditions, develop a list of water quality improvement projects, and identify funding sources to help develop needed system enhancements. The CURMP developed in 2005 will be revised to meet or exceed the requirements of the local NPDES permit.

Information developed by Moffat & Nichol will also be used in the General Plan update process to create polices that will promote water-sensitive techniques for