

**Multi-Jurisdictional
Hazard Mitigation Plan: San Diego
Unified Port District Annex**
San Diego County, California
2023



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1. SECTION ONE: Determine the Planning Area and Resources

1.1. Planning Area: San Diego Unified Port District

The San Diego Unified Port District (District) was established as a Special District by the State of California in 1962 through the passage of the San Diego Unified Port District Act. A special district is a form of government formed to full fill a specific governmental role which is typically specialized in nature. The District was formed “for the acquisition, construction, maintenance, operation, development and regulation of harbor works and improvements, including rail and water, for the development, operation, maintenance, control, regulation, and management of the harbor of San Diego upon the tidelands and lands lying under the inland navigable waters of San Diego Bay, and for the promotion of commerce, navigation, fisheries, and recreation thereon, may be established or organized and governed as provided in this act and it may exercise the powers expressly granted herein.” Over time and through a series of amendments to this act, the land area has expanded to its current area.

The cities of San Diego, Coronado, National City, Chula Vista, and Imperial Beach are member cities and a portion of their jurisdiction which meets the San Diego Bay forms part of the tidelands of the San Diego Bay. A seven-member Board of Port Commissioners governs the District. The City of San Diego appoints three members and each other member city appoints one member to the Board Port of Commissioners. The District’s maritime, real estate, and parking generates revenues which allows the District to operate without the benefit of tax dollars.

The Port consists of 34 miles of waterfront comprising 2,404 acres of land and 3,677 acres of water. The Port is the fourth largest port of California’s 11 ports and is 1 of 17 strategic ports in the United States. There are two cargo terminals located in the Bay. National City Marine Terminal is a 135-acre complex with four berths specializing in roll-on/roll-off vessels. This terminal receives goods including automobiles from manufactures such as Porsche, Audi and Toyota. Tenth Avenue Marine Terminal is a 96-acre complex with four berths and specialized in break bulk, refrigerated containers and dry bulk. This terminal also conducts several military equipment load outs consisting of a variety of military vehicles and aircraft per year. The Port has two cruise ship terminals located on Broadway Street and B Street Piers. The cruise ship terminals receive an average of 150 vessels per year. In 2021 and the first year past the COVID 19 pandemic, 75 cruise ship port calls were made to the Port of San Diego. In addition to maritime operations, the District offers a wide variety of public uses and include 5 public piers, 9 museums & attractions, 18 major hotels & resorts, 20 marinas and yacht clubs, 74 restaurants, 4 public boats ramps and 22 parks. The San Diego Convention Center is located on Tidelands and on an average host over 160 conferences. San Diego is a major tourism destination, and the Port plays a significant role in attracting visitors to the San Diego area. Tourism accounts for over 200,000 jobs generated \$11.6 million to the local economy pre-pandemic.

For the current fiscal year, the District is estimated to generate approximately \$171,000,000 in revenue through Port tenants, maritime commerce, parking and use fees. This revenue to redirected back into the District to fulfill its commitments.

SECTION ONE | Determine the Planning Area and Resources

The District is also a trustee of state lands subject to the Public Trust Doctrine, which mandates how California’s sovereign lands should be managed. Also known as public trust lands, they include areas that used to be or are still under the bay and other waters. These lands cannot be bought and sold because they are held in the public trust and belong to the people of the State of California. As the trustee of these lands, the District is responsible for carrying out the principles of the Public Trust Doctrine. This includes protecting the environment, promoting the public’s enjoyment of these lands, and enhancing economic development for the public’s benefit.

The District is responsible for achieving compliance with environmental laws and regulations, as well as aimed to reduce environmental pollutants in and around San Diego Bay. Also, the District advises the Board on actions that can be taken for the protection and improvement of the environmental conditions of the Bay and surrounding tidelands. As an environmental champion for the San Diego Bay and surrounding tidelands, the District is responsible for contributing to the region’s prosperity while protecting and enhancing the Bay’s natural resources. The District strives for a healthy and sustainable bay and its environment by overseeing the protection, conservation and enhancement of the Bay’s natural resources, including management of endangered species and sensitive wetland habitats.

In addition, San Diego is homeport to a wide variety of navy ship classes including Aircraft Carriers, Amphibious Ships, Cruisers, Destroyers, Littoral Combat Ships, Mine Countermeasure Ships and Fast Attack Submariners. The US Navy has 72 ships homeported in San Diego and is projected to have 77 by the end of FY2022. The DoD accounts for approximately 350,000 jobs or 23% of the current labor force in San Diego and the economic impact of defense spending in San Diego is \$55.2 billion which is estimated at 25% of the San Diego Gross Regional Product (GRP).

Naval Submarine Base Pt Loma, Naval Air Stations North Island, Naval Amphibious Base Coronado, Naval Base San Diego, Naval Surface and Mine Warfare Development Command and Navy Region Southwest Command are located on the Bay.

It should be noted, this is the first multi-hazard mitigation plan for the Port of San Diego.

1.2. Community Rating System Requirements

The Community Rating System (CRS) is a FEMA program and rewards communities that go beyond the minimum standards for floodplain management under the National Flood Insurance Program (NFIP). Communities can potentially improve their Community Rating System and lower NFIP premiums by developing a CRS Plan. **As a special district, the Port of San Diego is not NFIP eligible to participate, per FEMA requirements.**

For more information on the National Flood Insurance Program, see <http://www.fema.gov/national-flood-insurance-program>.

Community Rating System (CRS) Planning Steps	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
Step 1. Organize	Task 1: Determine the Planning Area and Resources Task 2: Build the Planning Team 44 CFR 201.6(c)(1)
Step 2. Involve the public	Task 3: Create an Outreach Strategy 44 CFR 201.6(b)(1)

SECTION ONE | Determine the Planning Area and Resources

Step 3. Coordinate	Task 4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Step 4. Assess the hazard	Task 5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
Step 5. Assess the problem	
Step 6. Set goals	Task 6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i) 44 CFR 201.6(c)(3)(ii) 44 CFR 201.6(c)(3)(iii)
Step 7. Review possible activities	
Step 8. Draft an action plan	
Step 9. Adopt the plan	Task 8: Review and Adopt the Plan 44 CFR 201.6(c)(5)
Step 10. Implement, evaluate, revise	Task 7: Keep the Plan Current Task 9: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

TABLE 1: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 1.1 DESCRIBES THE CRS REQUIREMENTS MET BY THE SAN DIEGO COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN.

Any jurisdiction or special district may participate in the hazard mitigation planning process. However, to request FEMA approval, each of the local jurisdictions must meet all requirements of 44 CFR §201.6. In addition to the requirement for participation in the process, the Federal regulation specifies the following requirements for multi-jurisdictional plans:

- The risk assessment must assess each jurisdiction’s risk where they may vary from the risks facing the entire planning area. (44 CFR §201.6(c)(2)(iii))
- There must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. (44 CFR §201.6(c)(3)(iv))
- Each jurisdiction requesting approval of the plan must document that it has been formally adopted. (44 CFR §201.6(c)(5))

The hazard mitigation plan must clearly list the jurisdictions that participated in the plan and are seeking plan approval. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan and annexes meet all requirements.

2. SECTION TWO: Build the Planning Team

2.1. Planning Participants

Port of San Diego Hazard Mitigation Working Group

- Lead Hazard Mitigation Work Group representative – Dave Foster (Homeland Security Program Manager)
- Port MJHMPP Developer and backup to Lead HMWGR – Cid Tesoro (Asst. VP, Infrastructure)
- Public Works – Ernie Medina (Chief Engineer / Director Engineering/Construction)
- Emergency Management – Dave Foster (Homeland Security Program Manager)
- Law Enforcement - Harbor P.D. Lieutenant Mike Dye
- General Services – Marco Cromartie (Director, General Services)
- Real Estate – Tony Gordon (Director, Real Estate)
- Planning – Aimee Heim (Grants Manager, Government & Civic Relations)
- Maritime – Joel Valenzuela (Director, Maritime Department)
- Stormwater Management – Karen Holman (Director, Environmental Protection)
- Public Information Officer – Jenifer Barsell (Director, Marketing & Communications)
- Risk & Safety – Anthony Kinzel (Risk Manager, Finance Department)

Schedule of Meetings (Tentative)

2nd Thursday of each month

2.2. Planning Process

The goals and objectives were developed by considering the risk assessment findings, localized hazard identification and loss/exposure estimates, and an analysis of the jurisdiction's current capabilities assessment. These preliminary goals, objectives and actions were developed to represent a vision of long-term hazard reduction or enhancement of capabilities. To help in further development of these goals and objectives, the LPG compiled and reviewed current jurisdictional sources including the City's planning documents, codes, and ordinances.

See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan's* Section Two for details about the county-wide Planning Process.

3. SECTION THREE: Create an Outreach Strategy

See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan's* Section Three for details about the county-wide outreach strategy.

SECTION FOUR | Review Community Capabilities

4. SECTION FOUR: Review Community Capabilities

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities, and must be included in a hazard mitigation plan by the planning team.

The planning team also may identify additional types of capabilities relevant to mitigation planning.

4.1. Capability Assessment

The primary types of capabilities for reducing long-term vulnerability through mitigation planning are:

- Planning and regulatory
- Administrative and technical
- Financial
- Education and outreach

4.1.1. Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Please indicate which of the following your jurisdiction has in place:

Plans	Yes/No Year	Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	YES 1981	This will be included in the Port Master Plan Update (PMPU) expected completion in 2022
Capital Improvements Plan	YES 2022	Yes
Economic Development Plan	N/A	N/A
Local Emergency Operations Plan	YES 2017	Yes
Continuity of Operations Plan	YES 2022	Yes

SECTION FOUR | Review Community Capabilities

Transportation Plan	NO	This will be included in the Port Master Plan Update (PMPU) expected completion in 2022
Stormwater Management Plan	YES 2019	Yes. Karen Holman
Community Wildfire Protection Plan	N/A	
M. Real estate disclosure requirements	YES N/A	The District's standard Lease conditions include environmental disclosure to Tidelands tenants. Mitigation of environmental hazards on District controlled Tidelands is implemented through; compliance with the environmental review process under CEQA, compliance with environmental regulations and as appropriate through environmental regulatory agency oversight.
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	YES 2021	Financial Disaster Recovery, Maritime / Environment / USCG / Federal Regulations, Climate Action Plan
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	YES	YES
Building Code Effectiveness Grading Schedule (BCEGS) Score	NA	Score:
Fire department ISO rating	NA	Rating:
Site plan review requirements	YES	Yes
Land Use Planning and Ordinances	Yes/No	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning ordinance	YES	Yes
Subdivision ordinance	NA	NA
Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	YES	Storm Water Management, Port Master Plan
Growth management ordinances (also called "smart growth" or anti-sprawl programs)	NA	

SECTION FOUR | Review Community Capabilities

Flood insurance rate maps	NA	
Acquisition of land for open space and public recreation uses	YES	Yes
Other	N/A	
How can these capabilities be expanded and improved to reduce risk?		
The Port of San Diego plans to enhance and improve its existing policies and programs in these capabilities through the Master Plan Update. This Update provides the current planning guidance for the entire Port of San Diego. Through this update, the Port will establish guidance for use in meeting its planning requirements.		

TABLE 2: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

4.1.2. Administrative and Technical

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. For smaller jurisdictions without local staff resources, if there are public resources at the next higher-level government that can provide technical assistance, indicate so in your comments:

Administration	Yes/No	Describe capability Is coordination effective?
Planner(s) or engineer(s) with knowledge of land development and land management practices	YES	Development Service / Engineering Yes
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	YES	Development Service / Engineering Yes
Planners or Engineer(s) with an understanding of natural and/or manmade hazards	YES	Development Service / Engineering Yes
Mitigation Planning Committee	NA	

SECTION FOUR | Review Community Capabilities

Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	YES	General Services / Guest Experience / AMP Yes
Mutual aid agreements	No	
Staff	Yes/No FT/PT¹	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official	NO	This function is fulfilled by each Member City
Floodplain Administrator	NO	
Emergency Manager	Yes F/T	Yes
Surveyors	Yes F/T	Yes
Staff with education or expertise to assess the community's vulnerability to hazards	Yes F/T	Yes
Community Planner	YES F/T	Yes
Scientists familiar with the hazards of the community	NO	
Civil Engineer	Yes F/T	Yes
Personnel skilled in GIS and/or HAZUS	Yes F/T	Yes
Grant writers	YES F/T	Yes
Other	N/A	
Technical	Yes/No	Describe capability Has capability been used to assess/mitigate risk in the past?
Warning systems/services (Reverse 911, outdoor warning signals)	Yes	Reverse 911

SECTION FOUR | Review Community Capabilities

Hazard data and information	Yes	Tsunami warning and readiness Yes
Grant writing	yes	Two full time and one part time staff position.
Hazus analysis	No	
Other		
How can these capabilities be expanded and improved to reduce risk?		
<p>The Port has initiated a project to identify staffing levels, duties and responsibilities, scope of work performed and other similar work factors. This project is expected to be completed in June 2023. Once complete, it will identify appropriate staffing levels, training, workloads, etc. The Port will then establish staff and training priorities which will support the sustainment and growth of the Port. This project will further enable the Port to meet the requirements to mitigate the hazards identified in this plan.</p>		

TABLE 3:FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.3. *Financial*

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation:

Funding Resource	Access/ Eligibility (Yes/No)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Community Development Block Grants (CDBG)	NO	
Capital improvements project funding	Yes	Self-funding and off-setting grants
Authority to levy taxes for specific purposes	Yes	Don't use this authority
Fees for water, sewer, gas, or electric service	No	Pass through
Impact fees for homebuyers or developers for new developments/homes	No	
Incur debt through general obligation bonds	No	

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Incur debt through special tax and revenue bonds	No	
Incur debt through private activity bonds	No	
Community Development Block Grants (CDBG)	No	
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
How can these capabilities be expanded and improved to reduce risk?		
<p>On November 7, 2022, the Port recently received an A+ rating from Fitch. As a self-funded jurisdiction, the Port is unique within the region. Growth through expanding the number and amount of cargo and cruise ship operations as well as expanding the number of hotels, adding convention center space, restaurants and other tourism related lines of business deepens the financial growth and stability of the Port. Through this financial stability and growth, the Port will be capable of supporting mitigation efforts.</p>		

TABLE 4: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.1.4. Education and Outreach

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information:

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	The following Port Department are involved in mitigation activities; MarCom, Environmental Protection / Conservation, Government Civic Relations
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	The following Port Department are involved in mitigation activities; HPD, MarCom, Environmental Protection / Conservation, Government Civic Relations, Maritime
Natural disaster or safety related school programs	No	
StormReady certification	No	

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Firewise Communities certification	No	
Public-private partnership initiatives addressing disaster-related issues	No	
Other		
How can these capabilities be expanded and improved to reduce risk?		
<p>The Port can more effectively engage the Port tenants, regional stakeholders, member cities of San Diego, Coronado, Imperial Beach, Chula Vista and National City through regular meetings, updates on current projects and planned projects, and solicit their input on proposed improvements. Through an on-going, regularly scheduled structure of public meetings, social media posts, etc., the Port can ensure a predictable flow of information. This predictability will improve stakeholder engagement and participation, improving the effectiveness of mitigation efforts.</p>		

TABLE 5: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA CONTINUED.

4.2. Safe Growth Audit

Identify gaps in your community's growth guidance instruments and improvements that could be made to reduce vulnerability to future development:

Comprehensive Plan	Yes	No
Land Use		
1. Does the future land-use map clearly identify natural hazard areas?	Yes	
2. Do the land-use policies discourage development or redevelopment within natural hazard areas?	Yes	
3. Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?	Yes	

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Transportation		
1. Does the transportation plan limit access to hazard areas?	N/A	
2. Is transportation policy used to guide growth to safe locations?	N/A	
3. Are movement systems designed to function under disaster conditions (e.g., evacuation)?	N/A	

TABLE 6: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA.

Comprehensive Plan (continued)	Yes	No
Environmental Management		
1. Are environmental systems that protect development from hazards identified and mapped?	Yes	
2. Do environmental policies maintain and restore protective ecosystems?	Yes	
3. Do environmental policies provide incentives to development that is located outside protective ecosystems?	Yes	
Public Safety		

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1. Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?	Yes	
2. Is safety explicitly included in the plan's growth and development policies?	Yes	
3. Does the monitoring and implementation section of the plan cover safe growth objectives?	Yes	

TABLE 7: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Zoning Ordinance	Yes	No
1. Does the zoning ordinance conform to the comprehensive plan in terms of discouraging development or redevelopment within natural hazard areas?	Yes	
2. Does the ordinance contain natural hazard overlay zones that set conditions for land use within such zones?	Yes	
3. Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?	No	
4. Does the ordinance prohibit development within, or filling of, wetlands, floodways, and floodplains?	Yes	
Subdivision Regulations	Yes	No
1. Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?	N/A	

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2. Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources?	N/A	
3. Do the regulations allow density transfers where hazard areas exist?	N/A	

TABLE 8: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Capital Improvement Program and Infrastructure Policies	Yes	No
1. Does the capital improvement program limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?	Yes	
2. Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?	Yes	
3. Does the capital improvement program provide funding for hazard mitigation projects identified in the FEMA Mitigation Plan?	Yes	
Other	Yes	No
1. Do small area or corridor plans recognize the need to avoid or mitigation natural hazards?	N/A	
2. Does the building code contain provisions to strengthen or elevate construction to withstand hazard forces?	N/A	
The Port uses local jurisdiction building codes		
3. Do economic development or redevelopment strategies include provisions for mitigation natural hazards?	Yes	

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4. Is there an adopted evacuation and shelter plan to deal with emergencies from natural hazards?		No

TABLE 9: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.2 DATA CONTINUED.

Questions were adapted from Godschalk, David R. *Practice Safe Growth Audits, Zoning Practice, Issue Number 10, October 2009, American Planning Association.*

4.3. National Flood Insurance Program (NFIP)

As a participant in the National Flood Insurance Program (NFIP), a community develops capabilities for conducting flood mitigation activities. The hazard mitigation plan must describe each jurisdiction's participation in the NFIP. Participating communities must describe their continued compliance with NFIP requirements. The mitigation plan must do more than state that the community will continue to comply with the NFIP. Each jurisdiction must describe their floodplain management program and address how they will continue to comply with the NFIP requirements. The local floodplain administrator is often the primary source for this information.

Jurisdictions where FEMA has issued a floodplain map but are currently not participating in the NFIP may meet this requirement by describing the reasons why the community does not participate. Plan updates must meet the same requirements and document any change in floodplain management programs.

As a special district the Port of San Diego is not NFIP eligible, per FEMA requirements.

NFIP Topic	Source of Information	Comments
Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	Comply with San Diego County Flood Control District
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	FEMA NFIP or Insurance Specialist	There have been 16 claims from 1979 to 2018. The total amount of those claims is \$6,190,500.00. Two of those claims were substantial. One claim was for \$3,000,000.00 and the other was \$1,126,500.00.
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	The Port has taken a percentage of building versus a raw number of buildings when considering the impacts resulting from flooding. Considering sea level rise and temporary coastal flooding (100-year storm event), the Port has determined up to 46% of buildings are at risk.

SECTION FOUR | Review Community Capabilities

Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	Comply with San Diego County Flood Control District
Staff Resources		
Is the Community FPA or NFIP Coordinator certified?	Community FPA	No
Is floodplain management an auxiliary function?	Community FPA	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	Comply with San Diego County Flood Control District
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	N/A
Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	Yes
Are there any outstanding compliance issues (i.e., current violations)?		No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		None
Is a CAV or CAC scheduled or needed?		No

TABLE 10: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA.

NFIP Topic	Source of Information	Comments
Regulation		
When did the community enter the NFIP?	Community Status Book http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book	Comply with San Diego County Flood Control District
Are the FIRMs digital or paper?	Community FPA	Both
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Yes

SECTION FOUR | Review Community Capabilities

Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP Flood Insurance Manual http://www.fema.gov/flood-insurance-manual Community FPA, FEMA CRS Coordinator, ISO representative	Comply with San Diego County Flood Control District
Community Rating System (CRS)		
Does the community participate in CRS?	Community FPA, State, FEMA NFIP	No
What is the community's CRS Class Ranking?	Flood Insurance Manual http://www.fema.gov/flood-insurance-manual	N/A
What categories and activities provide CRS points and how can the class be improved?		N/A
Does the plan include CRS planning requirements	Community FPA, FEMA CRS Coordinator, ISO representative	No

TABLE 11: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.3 DATA CONTINUED.

5. SECTION FIVE: Conduct a Risk Assessment

The planning team conducts a risk assessment to determine the potential impacts of hazards to the people, economy, and built and natural environments of the community. The risk assessment provides the foundation for the rest of the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards.

In addition to informing the mitigation strategy, the risk assessment also can be used to establish emergency preparedness and response priorities, for land use and comprehensive planning, and for decision making by elected officials, city and county departments, businesses, and organizations in the community.

5.1. Hazards Summary

Summarize hazard description information and identify which hazards are most significant to the planning area:

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Avalanche	Negligible	Weak	Unlikely	Low
Dam Failure	Negligible	Weak	Unlikely	Low
Drought	Significant	Moderate	Likely	Medium
Earthquake	Extensive	Extreme	Likely	High
Erosion	Limited	Moderate	Likely	Medium
Expansive Soils	Significant	Moderate	Occasional	Low
Extreme Cold	Negligible	Weak	Unlikely	Low
Extreme Heat	Limited	Moderate	Unlikely	Low
Flood	Limited	Severe	Occasional	Medium
Hail	Negligible	Weak	Unlikely	Low
Hurricane	Negligible	Weak	Unlikely	Low
Landslide	Limited	Moderate	Occasional	Medium
Lightning	Significant	Moderate	Highly likely	Medium
Sea Level Rise	Limited	Moderate	Occasional	Medium

SECTION FIVE | Conduct a Risk Assessment

Severe Wind	Limited	Moderate	Occasional	Medium
Severe Winter Weather	Limited	Moderate	Occasional	Medium
Storm Surge	Significant	Severe	Occasional	High
Subsidence	Negligible	Weak	Unlikely	Low
Tornado	Negligible	Weak	Unlikely	Low
Tsunami	Significant	Severe	Likely	High
Wildfire	Negligible	Weak	Unlikely	Low

TABLE 12: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Definitions for Classifications

Location (Geographic Area Affected)

- **Negligible:** Less than 10 percent of planning area or isolated single-point occurrences
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences
- **Extensive:** 75 to 100 percent of planning area or consistent single-point occurrences

Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- **Weak:** Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months
- **Extreme:** Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions

Hazard	Scale / Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index ³	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
Earthquake	Modified Mercalli Scale ⁴	I to IV	V to VII	VII	IX to XII
	Richter Magnitude ⁵	2, 3	4, 5	6	7, 8
Hurricane Wind	Saffir-Simpson Hurricane Wind Scale ⁶	1	2	3	4, 5
Tornado	Fujita Tornado Damage Scale ⁷	F0	F1, F2	F3	F4, F5

Probability of Future Events

SECTION FIVE | Conduct a Risk Assessment

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- **Occasional:** 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Overall Significance

- **Low:** Two or more criteria fall in lower classifications, or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

Hazards that can impact planning area:

- Earthquake – **The probability of future events is likely because of a 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years. Also, the overall significance is high because the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.** An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of the Earth's tectonic plates. The effects of an earthquake can be felt far beyond the site of its occurrence. They usually occur without warning and, after just a few seconds, can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. Ground motion is the vibration or shaking of the ground during an earthquake.

When a fault ruptures, seismic waves radiate, causing the ground to vibrate. The severity of the vibration increases with the amount of energy released and decreases with distance from the causative fault or epicenter. Soft soils can further amplify ground motions. The severity of these effects is dependent on the amount of energy released from the fault or epicenter. One way to express an earthquake's severity is to compare its acceleration to the normal acceleration due to gravity. The acceleration due to gravity is often called "g". A 100% g earthquake is very severe.

Several major active faults exist in San Diego County, including the Rose Canyon, La Nacion, Elsinore, San Jacinto, Coronado Bank and San Clemente Fault Zones. The Rose Canyon Fault Zone is part of the Newport-Inglewood fault zone, which originates to the north in Los Angeles, and the Vallecitos and San Miguel Fault Systems to the south in Baja California. The Rose Canyon Fault extends inland from La Jolla Cove, south through Rose Canyon, along the

SECTION FIVE | Conduct a Risk Assessment

east side of Mission Bay, and out into San Diego Bay. The Rose Canyon Fault is considered the greatest potential threat to San Diego as a region, due to its proximity to areas of high population. The La Nacion Fault Zone is located near National City and Chula Vista. Additional information is found on sec. 5.2.4 of the Multi-Jurisdictional Hazard Mitigation Plan, San Diego County.

- Storm Surge – **The probability of future events is occasional because 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years. Also, the overall significance is high because the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.** Coastal storms can cause increases in tidal elevations (called storm surge), wind speed, and erosion. The most dangerous and damaging feature of a coastal storm is storm surge. Storm surges are large waves of ocean water that sweep across coastlines where a storm makes landfall. Storm surges can inundate coastal areas, wash out dunes, and cause backwater flooding. If a storm surge occurs at the same time as high tide, the water height will be even greater.

With up to two feet of sea level rise projected by 2050, low-lying areas could become inundated more frequently and with increasingly higher water levels. In addition, storm related flooding may reach further inland and occur more often. Beaches and cliffs could also see increased erosion as they are exposed to more hours of high sea levels and wave action.¹¹⁶ The NOAA Sea Level Rise Viewer allows for planners to predict the impact of sea level rise over the next several decades.

According to the Sea Level Rise Adaptation Strategy for the San Diego Bay, the sectors that are most vulnerable to sea level rise are storm water, wastewater, shoreline parks, transportation facilities, commercial buildings, and ecosystems. Low-lying communities, such as Imperial Beach, Coronado, Mission Beach, and parts of La Jolla Shores, Del Mar, and Oceanside may be particularly vulnerable to sea level rise.¹¹⁷ In addition, some of San Diego's military installations and the region controlled by the Port of San Diego may also be affected.¹¹⁸ However, sea level rise is considered (on a scale of low, medium, high, very high) a low hazard for the region. Additional information is found on sec. 5.2.10 of the Multi-Jurisdictional Hazard Mitigation Plan, San Diego County.

- Tsunami - **The probability of future events is likely because 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years. Also, the overall significance is high because the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.**

A tsunami is a series of long waves generated in the ocean by a sudden displacement of a large volume of water. Underwater earthquakes, landslides, volcanic eruptions, meteoric impacts, or onshore slope failures can cause this displacement. Tsunami waves can travel at speeds averaging 450 to 600 miles per hour. As a tsunami nears the coastline, its speed diminishes, its wavelength decreases, and its height increases greatly. After a major earthquake or other tsunami-inducing activity occurs, a tsunami could reach the shore within a few minutes. One

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coastal community may experience no damaging waves while another may experience very destructive waves. Some low-lying areas could experience severe inland inundation of water and deposition of debris more than 3,000 feet inland. Historically the impact of Tsunamis on the San Diego coastline has been low, but inundation maps developed by the California Office of Emergency Services and the California Geologic Survey show the potential for moderate damage along low-lying areas. Additional information is found on sec. 5.2.10 of the Multi-Jurisdictional Hazard Mitigation Plan, San Diego County.

- Cumulative meteorological drought and wet conditions: <http://ncdc.noaa.gov/>
- Earthquake intensity and effect on population and structures: <http://earthquake.usgs.gov>
- Earthquake magnitude as a logarithmic scale, measured by a seismograph: <http://earthquake.usgs.gov>
- Hurricane rating based on sustained wind speed: <http://nhc.noaa.gov>
- Tornado rating based on wind speed and associated damage: <http://spc.noaa.gov>

5.2 Potential Hazard Exposure and Loss Estimates

The Unified Port of San Diego reviewed a set of jurisdictional-level hazard maps and data provided by the County of San Diego, including detailed critical facility information and localized potential hazard exposure/loss estimates related to residential, commercial, and critical asset/facilities to identify the top hazards threatening their United Port of San Diego. Potential hazard exposure/loss estimates are summarized in Table 5.

TABLE 5: SUMMARY OF POTENTIAL HAZARD-RELATED EXPOSURE/LOSS IN UNIFIED PORT OF SAN DIEGO

Hazard Type	Residential			Commercial		Critical Facilities	
	Exposed Population	Number of Residential Buildings	Potential Exposure Loss for Residential Buildings	Number of Commercial Buildings	Potential Exposure Loss for Commercial Buildings	Number of Critical Facilities	Potential Exposure for Critical Facilities
Coastal Storm	7667	0	0	1	\$302,350	1	\$719,792,500
Sea Level Rise							
Coastal Flooding	2,207	0	0	8	\$2,418,800	1	\$719,792,500
Mean Higher High Water	11,560	0	0	4	\$1,209,400	1	\$719,792,500
Dam Failure	7,034	0	0	48	\$14,512,800	12	\$289,964,200
Earthquake (Loss)							
(Annualized Loss - Includes shaking, liquefaction and	3,788	532	\$284,894,942	767	\$282,001,845	2	\$32,722,340

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landslide components)							
100 Year	0	0	0	0	0	0	0
500 Year	0	0	0	0	0	0	0
Floods (Loss)							
100 Year	17,614	0	0	2	\$604,700	2	\$726,462,500
500 Year	17,736	0	0	18	\$5,442,300	7	\$1,657,510,500
Rosa Canyon M6.9 Scenario	14,710	0	0	485	\$146,639,750	28	\$1,334,192,400
Rain-Induced Landslide							
High Risk	0	0	0	0	0	0	0
Moderate Risk	0	0	0	0	0	0	0
Tsunami	13,917	0	0	394	\$119,125,900	2	\$722,840,500
Wildfire/Structure Fire							
High Fire Hazard	0	0	0	0	0	0	0
Very High Fire Hazard	0	0	0	0	0	0	0

6. SECTION SIX: Develop a Mitigation Strategy

The mitigation strategy serves as the long-term blueprint for reducing potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process.

The mitigation strategy is made up of three main required components: mitigation goals, mitigation actions, and an action plan for implementation. These provide the framework to identify, prioritize, and implement actions to reduce risk to hazards.

Mitigation goals are general guidelines that explain what the community wants to achieve with the plan. They are usually broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.

Mitigation actions are specific projects and activities that help achieve the goals.

The action plan describes how the mitigation actions will be implemented, including how those actions will be prioritized, administered, and incorporated into the community's existing planning mechanisms. In a multi-jurisdictional plan, each jurisdiction must have an action plan specific to that jurisdiction and its vulnerabilities.

Although not required, some communities choose to develop **objectives** to help define or organize mitigation actions. Objectives are broader than specific actions, but are measurable, unlike goals. Objectives connect goals with the actual mitigation actions.

6.1. Mitigation Action Evaluation

Use this worksheet to help evaluate and prioritize each mitigation action being considered by the planning team. For each action, evaluate the potential benefits and/or likelihood of successful implementation for the criteria defined below.

Rank each of the criteria with a -1, 0 or 1 using the following scale:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

Example Evaluation Criteria:

- **Life Safety** – How effective will the action be at protecting lives and preventing injuries?
- **Property Protection** – How significant will the action be at eliminating or reducing damage to structures and infrastructure?
- **Technical** – Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.

SECTION SIX | Develop a Mitigation Strategy

- **Political** – Is there overall public support for the mitigation action? Is there the political will to support it?
- **Legal** – Does the community have the authority to implement the action?
- **Environmental** – What are the potential environmental impacts of the action? Will it comply with environmental regulations?
- **Social** – Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?
- **Administrative** – Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
- **Local Champion** – Is there a strong advocate for the action or project among local departments and agencies that will support the action’s implementation?
- **Other Community Objectives** – Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of the comprehensive plan?

Mitigation Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	Total Score
Local Plans and Regulations											
Basic EOP	1	1	0	1	1	1	1	1	0	0	7
BRC 777	0	0	0	1	1	0	0	1	0	0	3
Coastal Adaption Action Plan	0	1	1	1	1	0	1	0	1	1	7
Structure and Infrastructure Projects											
Curtain Wall Repair, B Street Pier	1	1	1	1	1	1	0	1	1	1	9
Pile Repairs, Navy Pier, Broadway Pier, B Street NCMT	1	1	1	1	1	1	0	1	1	1	9
Rip rap repair, Imperial Beach	1	1	1	1	1	1	0	1	1	1	9
Electrical improvements at TAMT	1	1	1	1	1	1	0	1	1	1	9
San Diego Bay Regional Fiber Optic Infrastructure	1	1	1	1	1	1	0	1	1	1	9
Natural Systems Protection											
EConcrete- Harbor Island	0	1	1	1	1	1	0	1	1	1	8
Expanded Nature-based shoreline solutions	0	1	1	1	1	1	0	1	1	1	8

SECTION SIX | Develop a Mitigation Strategy

Education and Awareness Programs											
Stormwater education and outreach	0	0	1	1	1	1	0	1	1	0	6
Sea level rise awareness	1	1	1	1	1	1	0	1	1	0	8
Community Emergency Response Training for Port Tenants Associations	1	1	1	1	0	1	0	1	1	0	7

TABLE 13: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

6.2. Mitigation Action Implementation

A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process. For more information on potential funding sources and grants for mitigation actions, please see the County of San Diego Multi-jurisdictional Hazard Mitigation Base Plan, Section 6.2. This annex details the following mitigation action implementations:

SECTION SIX | Develop a Mitigation Strategy**Action 1:**

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Community Emergency Response Training (CERT) for Port Tenants Association (PTA)
Hazard(s) Mitigated:	All Hazards
Background/Issue:	The PTA includes hotels, bars / restaurants, maritime businesses, museums, sport fisherman, commercial fisheries, etc. These businesses include a mix of tourism as well as businesses supporting the use of the San Diego Bay or rely upon it. These businesses are spread throughout the Bay.
Ideas for Integration:	Basic Emergency Operations Plan
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego – Real Estate, Port Tenants Associations (PTA)
Potential Funding:	Port Security Grant Program (PSGP)
Cost Estimate:	\$150,000.00-200,000.00
Benefits: (Losses Avoided)	Providing CERT to PTA which includes large format hotels, bars / restaurants will reduce the potential for loss of life and assist in the initial phase of emergency response to a local, regional, State and or Federal emergency.
Timeline:	Develop CERT program starting in 2024 Conduct CERT starting in 2024 and running through 2028
Priority:	Medium
Worksheet Completed by:	Dave Foster, Homeland Security Cid Tesoro, Vice President, Facilities & Engineering

SECTION SIX | Develop a Mitigation Strategy**Action 2:**

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Curtain Wall Improvements and Backfilling (North) - B Street Pier
Hazard(s) Mitigated:	Earthquake, Storm Surge, Tsunamis, Sea Level Rise, Erosion
Background/Issue:	Rehabilitate and repair the structural wall on the north side of B Street Pier. The current curtain wall is approximately 100 years old and is compromised in some areas.
Ideas for Integration:	Basic Emergency Operations Plan
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego – Engineering, Maritime
Potential Funding:	TBD; Local planning team will continue to research local, state, and federal funding opportunities such as grants.
Cost Estimate:	\$40,000,000.00
Benefits: (Losses Avoided)	A safe and operating pier for multiple lines of commerce. Safe and operational piers and berths ensuring the flow of commerce. Additionally, maintain the availability of these facilities for use in response to a local, regional, State and or Federal emergency.
Timeline:	Commence construction in 2022 and complete in the summer of 2024
Priority:	High
Worksheet Completed by:	Dave Foster, Homeland Security Cid Tesoro, Vice President, Facilities & Engineering

SECTION SIX | Develop a Mitigation Strategy**Action 3:**

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Electrical improvements – Tenth Avenue Marine Terminal (TAMT)
Hazard(s) Mitigated:	All Hazards
Background/Issue:	The 1955-era 12 KV electrical distribution system has exceeded its useful life and needs replacement in order to support current and future electrical loads. The system has outdated, inefficient components that include Paper-Insulated Lead-Covered (PILC) cables, manually operated oil-filled high voltage switches with bottom-entry terminators and asbestos-cement conduits. It is difficult to find repair parts and skilled labor to maintain these outdated components.
Ideas for Integration:	None
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego – Engineering, Maritime, Dole, Jankovic
Potential Funding:	TBD; Local planning team will continue to research local, state, and federal funding opportunities such as grants.
Cost Estimate:	\$3,500,000.00
Benefits: (Losses Avoided)	Safe, sustainable, and flexible electrical system which will support future growth for the Port. Safe and operational piers and berths ensuring the flow of commerce. Additionally, maintain the availability of these facilities for use in response to a local, regional, State and or Federal emergency.
Timeline:	Commence construction in 2023 and complete first phase by 2024. Design of remaining phases in 2024 with construction in 2025-2026
Priority:	High

SECTION SIX | Develop a Mitigation Strategy

Worksheet Completed by:	Dave Foster, Homeland Security Cid Tesoro, Vice President, Facilities & Engineering Yeshitla Mulugeta, Engineering
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Action 4:

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Structural Pile Improvements - Broadway Pier, Navy Pier, B Street Pier, National City Marine Terminal (NCMT)
Hazard(s) Mitigated:	Earthquake, Storm Surge, Tsunamis, Sea Level Rise, Erosion
Background/Issue:	This project will complete an inspection, design, and construction for crack repair, spalling, and related concrete damage under the piers. The piles have exceeded their intended operational life. Some piles have been repaired but not all.
Ideas for Integration:	Basic Emergency Operations Plan
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego – Engineering, Maritime, cruise ship and cargo terminal operators
Potential Funding:	Infrastructure Investment and Jobs Act (IIJA). State Grants. Hazardous Mitigations Grants Program (HMGP)
Cost Estimate:	\$18,000,000.00
Benefits: (Losses Avoided)	Safe and operational piers and berths ensuring the flow of commerce. Additionally, maintain the availability of these facilities for use in response to a local, regional, State and or Federal emergency.
Timeline:	Commence construction on Navy Pier in late 2022 and complete by fall of 2023. Design and construction of improvements on Broadway Pier and NCMT to begin in 2024 and completion in 2028
Priority:	HIGH

SECTION SIX | Develop a Mitigation Strategy

Worksheet Completed by:	Dave Foster, Homeland Security Cid Tesoro, Vice President, Facilities & Engineering
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Action 5:

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Plans and Regulations / Basic Emergency Operations Plan and associated plans, Continuity of Operations Plan and Board of Port Commissioners Policy 777
Hazard(s) Mitigated:	All Hazards
Background/Issue:	These plans require scheduled review and update. The available staff to conduct this on-going requirement is not sufficient to fulfill this requirement.
Ideas for Integration:	Financial Disaster Recovery Plan, Port wide staff emergency response training, ICS / NEMS
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego –all departments, USCG, Port Tenants Association, DOD-US NAVY, Cities of Imperial Beach, National City, Chula Vista, Coronado, and San Diego
Potential Funding:	Port Security Grant Program Funding, Port General Fund
Cost Estimate:	\$300,000.00-500,000.00
Benefits: (Losses Avoided)	Out of date or incomplete emergency planning documents could delay response time and will prevent receiving Federal reimbursement from a declared emergency
Timeline:	Commence plan reviews in 2023 and complete updates by 2025
Priority:	Medium

SECTION SIX | Develop a Mitigation Strategy

Worksheet Completed by:	Dave Foster / Homeland Security Cid Tesoro, Vice President, Facilities & Engineering
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Action 6:

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	San Diego Regional Fiber Optic Infrastructure
Hazard(s) Mitigated:	All Hazards
Background/Issue:	Sharing data around the Bay between the five member cities and the Port is an operational imperative. Our ability to monitor the Bay and provide real-time situational awareness is essential in day-to-day operations as well as when responding / recovering from a disaster or emergency. Through increased reliance on CCTV and other sensors by Harbor Police and the Joint Harbor Operations Center (JHOC-a unified operations center at USCG Sector San Diego), the variety of IT enterprises throughout the Port and the adoption of a mixed in-person and virtual staffing approach to EOC operations, there is heavy reliance on reliable, efficient connectivity and communications.
Ideas for Integration:	IT Infrastructure Planning
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego – Engineering, HPD, Maritime, IT, USCG, City of Imperial Beach, National City, Chula Vista, Coronado, and San Diego
Potential Funding:	TBD – Local, state, and/or federal Grants
Cost Estimate:	\$13,000,000.00
Benefits: (Losses Avoided)	Maintain and sustain communications during a critical incident is essential to the Port's ability to effectively, efficiently respond and recover to a local, regional, State and or Federal emergency.

SECTION SIX | Develop a Mitigation Strategy

Timeline:	Commence construction of segments along the westerly portion of the District in 2023 and complete the loop in 2028.
Priority:	High
Worksheet Completed by:	Dave Foster, Homeland Security Cid Tesoro, Vice President, Facilities & Engineering Eric Guerreiro, Engineering

Action 7:

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Expand nature-based shoreline solutions
Hazard(s) Mitigated:	Sea Level Rise, Flooding, Erosion
Background/Issue:	To address sea level rise, flooding, and erosion, the Port of San Diego is pursuing innovative, nature-based shoreline solutions throughout San Diego Bay. Nature-based solutions provide multiple environmental or community benefits when implemented, including habitat enhancement and restoration, water quality improvement, air quality improvement, sequestration, environmental education, while improving resiliency via shoreline stabilization and protection of upland areas. Shoreline stabilization efforts assist with the protection of Port infrastructure such as piers, terminals, buildings and roadways.
Ideas for Integration:	Nature-based shoreline solutions are encouraged by the Port's State agency partners, and similarly are encouraged through planning and policy from the Port. Initiatives such as the Port Master Plan Update, Integrated Natural Resources Management Plan (INRMP), Sea Level Rise and Coastal Resiliency Report, Blue Economy Incubator, and the Port's aquaculture program all encourage the use of nature-based shoreline solutions. .
Responsible Agency:	Port of San Diego
Partners:	State agencies, federal agencies, private companies, foundations
Potential Funding:	State agencies, federal agencies, foundations, philanthropic organizations
Cost Estimate:	\$1M-\$300M.
Benefits: (Losses Avoided)	Losses avoided: flooding impacts, erosion impacts, loss of habitat, damage to structures, public safety Benefits: Environmental quality, enhanced habitat, increased biodiversity, carbon sequestration to mitigate effects of climate change, protected shorelines and upland areas, opportunities for environmental education and citizen-based science.

SECTION SIX | Develop a Mitigation Strategy

Timeline:	Commence construction in 2023 and target completion in 2028.
Priority:	High
Worksheet Completed by:	Lily Tsukayama, Senior Planner Dave Foster, Homeland Security Program Manager

Action 8:

Jurisdiction:	Port of San Diego
Mitigation Action/Project Title:	Coastal Adaptation Action Plan
Hazard(s) Mitigated:	Sea Level Rise, Flooding, Erosion
Background/Issue:	To proactively address and identify mitigation and adaptation strategies for flooding and sea level rise and erosion
Ideas for Integration:	Port Master Plan Update, Sea Level Rise Vulnerability Assessment and Coastal Resiliency Report, and Integrated Natural Resources Management Plan.
Responsible Agency:	Port of San Diego
Partners:	Port of San Diego Member Cities, U.S. Navy, SANDAG, State agencies, environmental stakeholders, members of the public
Potential Funding:	Internal or external sources such as local, state and/or federal grants
Cost Estimate:	\$500,000 - \$1,000,000
Benefits: (Losses Avoided)	Prevent damage to infrastructure or other assets on Tidelands; increase resilience to flooding, wave over-topping, other impacts exacerbated by sea level rise
Timeline:	Commence analysis and plan updates in 2023 and target completion in 2028
Priority:	High

SECTION SIX | Develop a Mitigation Strategy

Worksheet Completed by:	Lily Tsukayama, Senior Planner
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7. SECTION SEVEN: Keep the Plan Current

Hazard Mitigation Plan maintenance is the process the planning team establishes to track the plan's implementation progress and to inform the plan update. The plan must include a description of the method and schedule for monitoring, evaluating, and updating it within a 5-year cycle. These procedures help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program in your community.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into community officials' daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

Hazard Mitigation Plan updates provide the opportunity to consider how well the procedures established in the previously approved plan worked and revise them as needed. This annex is part of the most recent *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* update. The plan was last updated in 2018. See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan* for more information.

7.1. Mitigation Action Progress

Plan monitoring means tracking the implementation of the plan over time. The plan must identify how, when, and by whom the plan will be monitored.

The Port of San Diego did not participate in the 2018 Update. Therefore, the Port has no reportable mitigation actions at the time.

The Port recognized the importance of not only having a Hazard Mitigation Plan, but also ensuring that plan is promulgated throughout the District and included within existing planning mechanisms and processes.

The Port will track progress and make changes for the next 5-year cycle through existing plans and initiatives a. One approach involves the Port's current efforts to update the Port Master Plan, a water and land use plan that designates specific areas of San Diego Bay and the surrounding waterfront for maritime, fishing, visitor-serving commercial, recreational, conservation, and institutional uses. The plan determines where port activities should take place, where recreational amenities should be located, and where commercial uses like hotels, restaurants, and visitor-serving retail may be built

The Port Master Plan was certified by the California Coastal Commission in 1981 and supports the Port's mission to develop San Diego Bay for multiple purposes and uses for the benefit of the people of the State of California. Since then, 40 Port Master Plan Amendments (PMPAs) have also

SECTION SEVEN | Keep the Plan Current

been certified by the California Coastal Commission. The most recent Port Master Plan was complete in 2017 and the Port Master Plan Update (PMPU) is currently being updated.

As part of the Port Master Plan Update (PMPU) and continuing robust public outreach in the Port of San Diego's planning for the "future of the Port", the public and stakeholders were invited to review and provide feedback on the Draft Program Environmental Impact Report (EIR) for the PMPU between November 23, 2021 and January 10, 2022.

The Draft EIR includes analysis of potential environmental impacts such as, but not limited to, air quality, climate change, traffic, noise, and natural resources. The Draft PMPU includes goals, policies and development standards that reflect extensive input from the public, stakeholders, and the Board of Port Commissioners. We welcome and encourage all feedback and are grateful the community is engaged in the PMPU process.

It is anticipated the Port Master Plan Update (PMPU) will be reviewed and approved by the Port Board; the governing body comprised of appointed representatives for the member cities of San Diego, Coronado, Imperial Beach, Chula Vista and National City, mid-2023. Once approved by the Port Board, the Port Master Plan Update (PMPU) will be submitted to the California Coastal Commission for approval. The California Coastal Commission approval is required for projects within the Port ensuring any plans include and ensure the public use of the San Diego Bay.

Another important implementation mechanism is the integration of the mitigation strategies described in Section 6.2 into the Port's plans and operations where feasible. Mitigation is most successful when it is incorporated into the day-to-day functions and priorities of government and development. The point is re-emphasized here. As described in Section 4 above, the Port already implements policies and programs to reduce losses to life and property from hazards. This LHMP builds upon the efforts developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through these other program mechanisms. These existing mechanisms include:

- Asset Management Program
- Port Emergency Operations Plans and other emergency management efforts
- Port ordinances
- Stormwater management plans
- Other plans and policies outlined in the capability assessment
- Attending other planning/program meetings
- Participating in other planning processes
- Monitoring for other program opportunities.

The successful implementation of this mitigation strategy will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community.

An example is the Asset Management Program (AMP) which identifies key infrastructure repairs and upgrades. The data driven program ensures appropriate projects are identified, developed, managed and completed which support the Port's mission. The Asset Management Program is

SECTION SEVEN | Keep the Plan Current

reviewed and updated annually. Through this program, the Port remains focused on priorities for improvement of Port Facilities.

Section 21081.6 of the Public Resources Code requires a lead agency to adopt a “reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment” (Section 15097 of the California Environmental Quality Act (CEQA) Guidelines provides additional direction on mitigation monitoring or reporting). As lead agency for the proposed project, the San Diego Unified Port District (District) is responsible for administering and implementing the Mitigation Monitoring and Reporting Program (MMRP).

The development of this first Hazard Mitigation Plan for the Port is the first step in integrating Hazard Mitigation Plan management into the Port’s planning. As required, the Ports Hazard Mitigation Plan will be submitted to the Port Board for review and approval. Once approved by the Port Board, the Port’s Emergency Management Staff will begin socializing the approved Hazard Mitigation Plan to District. Socializing this Plan will highlight and deepen the understanding of the importance of this Plan. It will also identify the need to incorporate Hazard Mitigation Planning into the existing planning processes described above. As the Ports understanding of the Hazard Mitigation Plan, it is expected additional planning mechanisms, processes and staff will be identified within the District. As those are identified, they will be incorporated in the planning process. The Port will continue to monitor and incorporate those changes as they occur.

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