

1.1 City of Coronado

The City of Coronado (Coronado) reviewed a set of jurisdictional-level hazard maps including detailed critical facility information and localized potential hazard exposure/loss estimates to help identify the top hazards threatening their jurisdiction. In addition, LPGs were supplied with exposure/loss estimates for Coronado summarized in Table 5.5-1. See Section 4.0 for additional details.

**Table 5.5-1
Summary of Potential Hazard-Related Exposure/Loss in Coronado**

Hazard Type	Exposed Population	Residential		Commercial		Critical Facilities	
		Number of Residential Buildings	Potential Exposure/Loss for Residential Buildings (x\$1,000)	Number of Commercial Buildings	Potential Exposure/ Loss for Commercial Buildings (x\$1,000)	Number of Critical Facilities	Potential Exposure for Critical Facilities (x\$1,000)
Coastal Storm / Erosion	105	0	0	0	0	0	0
Sea Level Rise	1,197	294	87,761	18	6,371	16	23,378
Dam Failure	0	0	0	0	0	0	0
Earthquake (Annualized Loss - Includes shaking, liquefaction and landslide components)	23,085*	8,713*	2,452,710*	3,407*	1,192,402*	102*	288,838*
Flood (Loss)							
100 Year	568	195	54,893	0	0	8	11,969
500 Year	761	214	60,241	16	5,445	10	14,638
Rain-Induced Landslide							
High Risk	0	0	0	0	0	0	0
Moderate Risk	0	0	0	0	0	0	0
Tsunami	6,627	3,471	977,087	361	126,264	56	79,545
Wildfire / Structure Fire							
Fire Regime II & IV	22,740	9,263	2,607,535	3,372	1,180,036	103	291,811

* Represents best available data at this time.

After reviewing the localized hazard maps and exposure/loss table above, the following hazards were identified by the Coronado LPG as their top four. A brief rationale for including each of these is included.

- **Earthquake:** The potential for loss of life, injuries, and damage to property, as well as disruption of services, is significant.
- **Coastal Storms/Flooding:** Jurisdiction is surrounded by water. Coastal storms and flooding have potential to cause losses.

- **Tsunami:** Jurisdiction is surrounded by water. There has been a history of tsunami effects felt in the region.
- **Manmade Hazards:** The community hosts several sites/assets within and surrounding the jurisdiction that may be at risk for potential manmade hazards.

1.1.1 Capabilities Assessment

The LPG identified current capabilities available for implementing hazard mitigation activities. The Capability Assessment (Assessment) portion of the jurisdictional mitigation plan identifies administrative, technical, legal and fiscal capabilities. This includes a summary of departments and their responsibilities associated to hazard mitigation planning as well as codes, ordinances, and plans already in place associated to hazard mitigation planning. The second part of the Assessment provides Coronado's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items.

1.1.2 Existing Institutions, Plans, Policies and Ordinances

The following is a summary of existing departments in Coronado and their responsibilities related to hazard mitigation planning and implementation, as well as existing planning documents and regulations related to mitigation efforts within the community. The administrative and technical capabilities of Coronado, as shown in Table 5.5-2, provides an identification of the staff, personnel, and department resources available to implement the actions identified in the mitigation section of the Plan. Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land development and land management practices, engineers trained in construction practices related to building and infrastructure, planners and engineers with an understanding of natural or manmade hazards, floodplain managers, surveyors, personnel with GIS skills and scientists familiar with hazards in the community.

Table 5.5-2
City of Coronado: Administrative and Technical Capacity

Staff/Personnel Resources	Y/N	Department/Agency and Position
A. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Community Development/ Associate Planner
B. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Community Development/Senior Building Inspector
C. Planners or Engineer(s) with an understanding of natural and/or manmade hazards	N	
D. Floodplain manager	N	
E. Surveyors	N	
F. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Fire/Division Chief; Community Development/Senior Planner; Engineering/Principal Engineer; Public Services/Services Supervisor
G. Personnel skilled in GIS and/or HAZUS	Y	Public Services, Technicians
H. Scientists familiar with the hazards of the community	N	
I. Emergency manager	Y	Police and Fire Chiefs
J. Grant writers	N	

The legal and regulatory capabilities of Coronado are shown in Table 5.5-3, which presents the existing ordinances and codes that affect the physical or built environment of Coronado. Examples of legal and/or regulatory capabilities can include: the City's building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, growth management ordinances, site plan review, general plans, capital improvement plans, economic development plans, emergency response plans, and real estate disclosure plans.

**Table 5.5-3
City of Coronado: Legal and Regulatory Capability**

Regulatory Tools (ordinances, codes, plans)	Local Authority (Y/N)	Does State Prohibit? (Y/N)
A. Building code	Y	N
B. Zoning ordinance	Y	N
C. Subdivision ordinance or regulations	Y	N
D. Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Y	N
E. Growth management ordinances (also called "smart growth" or anti-sprawl programs)	N	N
F. Site plan review requirements	Y	N
G. General or comprehensive plan	Y	N
H. A capital improvements plan	Y	N
I. An economic development plan	N	N
J. An emergency response plan	Y	N
K. A post-disaster recovery plan	Y	N
L. A post-disaster recovery ordinance	Y	N
M. Real estate disclosure requirements	Y	N

1.1.3 Fiscal Resources

Table 5.5-4 shows specific financial and budgetary tools available to Coronado such as community development block grants; capital improvements project funding; authority to levy taxes for specific purposes; fees for water, sewer, gas, or electric services; impact fees for homebuyers or developers for new development; ability to incur debt through general obligations bonds; and withholding spending in hazard-prone areas.

**Table 5.5-4
City of Coronado: Fiscal Capability**

Financial Resources	Accessible or Eligible to Use (Yes/No)
A. Community Development Block Grants (CDBG)	Yes - Eligible in certain circumstances
B. Capital improvements project funding	Yes - With Council approval
C. Authority to levy taxes for specific purposes	Yes - With 2/3 voter approval
D. Fees for water, sewer, gas, or electric service	Yes - For sewer only
E. Impact fees for homebuyers or developers for new developments/homes	No
F. Incur debt through general obligation bonds	Yes - With 2/3 voter approval
G. Incur debt through special tax and revenue bonds	Yes - With 2/3 voter approval
H. Incur debt through private activity bonds	No
I. Withhold spending in hazard-prone areas	Yes
J. Other – SANDAG Grant	No
K. Other – Other Grants	Yes

1.1.4 Goals, Objectives and Actions

Listed below are Coronado’s specific hazard mitigation goals, objectives and related potential actions. For each goal, one or more objectives have been identified that provide strategies to attain the goal. Where appropriate, the City has identified a range of specific actions to achieve the objective and goal.

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. In addition, City representatives met with consultant staff and/or OES to specifically discuss these hazard-related goals, objectives and actions as they related to the overall Plan. Representatives of numerous City departments involved in hazard mitigation planning, including Fire, Police, and Public Works participated in the Coronado LPG. These members include:

- Mike Blood, Director of Fire Services
- Perry Peake, Fire Division Chief
- Ed Walter, Community Development Senior Planner
- Scott Huth, Public Services Supervisor

Once developed, City staff submitted the plan to CalOES and FEMA for approval. Once the plan is approved it will be submitted to the City Council for adoption.

A public survey was posted on all participating agencies websites from March through July 2014. Over 500 responses were received. The survey results are in Appendix E.

The following sections present the hazard-related goals, objectives and actions as prepared by Coronado’s LPG in conjunction with the Hazard Mitigation Working Group, locally elected officials, and local citizens.

1.1.4.1 Goals

The City of Coronado has developed the following 11 Goals for their Hazard Mitigation Plan (See Attachment A for Goals 10 and 11).

Goal 1. Promote disaster-resistant future development.

Goal 2. Increase public understanding, support, and demand for effective hazard mitigation.

Goal 3. Build and support local capacity and commitment to continuously become less vulnerable to hazards.

Goal 4. Improve coordination and communication with federal, state, local and tribal governments.

“Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and State-owned facilities, due to”:

Goal 5. Floods

Goal 6. Urban Conflagrations

Goal 7. Severe Weather

Goal 8. Dam Failure

Goal 9. Geological Hazards

Goal 10. Extremely Hazardous Materials Releases

Goal 11. Other Manmade Hazards

1.1.4.2 Objectives and Actions

The City of Coronado developed the following broad list of objectives and actions to assist in the implementation of each of their 11 identified goals. The City of Coronado developed objectives to assist in achieving their hazard mitigation goals. For each of these objectives, specific actions were developed that would assist in their implementation. A discussion of the prioritization and implementation of the action items is provided in Section 5.5.5

Goal 1: Promote disaster resistant future development.		Applies to New, Existing or Both
<i>Objective 1.A: Maintain and update the general plans and zoning ordinances to limit development in hazard areas.</i>		
Action 1.A.1	Continue to enforce existing general plan policies to limit development in hazard zones.	

Goal 1: Promote disaster resistant future development.		Applies to New, Existing or Both
<i>Objective 1.B: Maintain and update building codes that protect renovated existing assets and new development in hazard areas.</i>		
Action 1.B.1	Continue to adopt building codes on a regular basis	
<i>Objective 1.C: Encourage consistent enforcement of general plans, zoning ordinances, and building codes.</i>		
Action 1.C.1	Educate people responsible for enforcing codes	
<i>Objective 1.D: Discourage future development that exacerbates hazardous conditions.</i>		
Action 1.D.1	Educate the public on known hazards	

Goal 2: Promote public understanding, support and demand for hazard mitigation.		Applies to New, Existing or Both
<i>Objective 2.A: Educate the public to increase awareness of hazards and opportunities for mitigation actions.</i>		
Action 2.A.1	Conduct Community Emergency Response Team Training	
Action 2.A.2	Release pertinent information through an Emergency Preparedness newsletter	
Action 2.A.3	Conduct Learn Not to Burn Classes in local schools	
Action 2.A.4	Release public education information on local cable TV.	
<i>Objective 2.B: Promote partnerships between the state, county and local governments to identify, prioritize, and implement mitigation actions.</i>		
Action 2.B.1	Participate in Hazard Mitigation programs	
Action 2.B.2	Participate in the Unified Disaster Council	
<i>Objective 2.C: Promote hazard mitigation in the business community.</i>		
Action 2.C.1	Conduct Fire Company Inspections	
Action 2.C.2	Require fire sprinkler systems in all occupancies except R3s	
Action 2.C.3	Provide Community Emergency Response Team training to the business community	
<i>Objective 2.D: Monitor and publicize the effectiveness of mitigation actions implemented.</i>		
Action 2.D.1	Publish an Emergency Preparedness Newsletter quarterly	
Action 2.D.2	Release information to the public through the media	
Action 2.D.3	Relay useful information through the Coronado Currents Newsletter	

Goal 2: Promote public understanding, support and demand for hazard mitigation.		Applies to New, Existing or Both
<i>Objective 2.E: Discourage activities that exacerbate hazardous conditions.</i>		
Action 2.E.1	Conduct community education through newsletters, media releases and community forums	
Action 2.E.2	Enforcement of actions that are in violation of Federal, State or local laws or codes	

Goal 3: Build and support local capacity and commitment to continuously become less vulnerable to hazards.		Applies to New, Existing or Both
<i>Objective 3.A: Increase awareness and knowledge of hazard mitigation principles and practice among local officials.</i>		
Action 3.A.1	Conduct EOC training and drills	
<i>Objective 3.B: Develop model hazard mitigation plan.</i>		
Action 3.B.1	Participate in Hazard Mitigation Work Group	
<i>Objective 3.C: Provide web-based information regarding hazard mitigation on City web site.</i>		
Action 3.C.1	Provide current information on emergency preparedness on City web-site	

Goal 4: Improve hazard mitigation coordination and communication with federal, state, local and tribal governments.		Applies to New, Existing or Both
<i>Objective 4.A: Establish and maintain closer working relationships with state agencies, local and tribal governments.</i>		
Action 4.A.1	Work with the UDC at County OES	
<i>Objective 4.B: Improve the City's capability and efficiency at administering pre- and post-disaster mitigation.</i>		
Action 4.B.1	Provide NIMS/SEMS/ICS training for City personnel	
Action 4.B.2	Conduct EOC drills	

Goal 5: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>floods</u>.		Applies to New, Existing or Both
<i>Objective 5.A: Develop a comprehensive approach to reducing the possibility of damage and losses due to floods.</i>		
Action 5.A.1	Investigate methods to enhance survivability in low-lying areas	
Action 5.A.2	Purchase/maintain equipment for water removal in area prone to flooding	
Action 5.A.3	Maintain infrastructure in known flood areas	

Goal 5: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>floods</u>.		Applies to New, Existing or Both
Action 5.A.4	Continue to participate in the National Flood Insurance Program and requirement to review applications for conformance with NFIP standards. Periodically review City compliance with NFIP requirements, as resources become available.	
<i>Objective 5.B: Coordinate with and support existing efforts to mitigate floods (e.g., US Army Corps of Engineers, US Bureau of Reclamation, California Department of Water Resources).</i>		
Action 5.B.1	Make contacts and develop a network during EOC exercises	

Goal 6: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>urban conflagrations</u>.		Applies to New, Existing or Both
<i>Objective 6.A: Develop a comprehensive approach to reducing the possibility of damage and losses due to urban conflagrations.</i>		
Action 6.A.1	Provide additional staffing and apparatus	
Action 6.A.2	Coordinate mutual/automatic aid agreements	
Action 6.A.3	Develop and enhance existing sprinkler ordinance	
<i>Objective 6.B: Protect existing assets with the highest relative vulnerability to the effects of urban conflagrations.</i>		
Action 6.B.1	Develop and enhance existing sprinkler ordinance	
Action 6.B.2	Coordinate mutual/automatic aid agreements	
Action 6.B.3	Provide additional staffing and apparatus	

Goal 7: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>severe weather</u> (e.g., El Nino storms/, thunderstorms, lightning, tsunamis, and extreme temperatures).		Applies to New, Existing or Both
<i>Objective 7.A: Develop a comprehensive approach to reducing the possibility of damage and losses due to severe weather.</i>		
Action 7.A.1	Provide public education through Community Emergency Response Team training	
<i>Objective 7.B: Protect existing assets with the highest relative vulnerability to the effects of weather.</i>		
Action 7.B.1	Maintain the infrastructure responsible for moving water	
Action 7.B.2	Maintain equipment for moving water during a storm	

Goal 7: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>severe weather</u> (e.g., El Nino storms/, thunderstorms, lightning, tsunamis, and extreme temperatures).		Applies to New, Existing or Both
<i>Objective 7.C: Coordinate with and support existing efforts to mitigate severe weather (e.g., National Weather Service).</i>		
Action 7.C.1	Include the NWS and the NOAA in our EOC Drills	
<i>Objective 7.D: Minimize losses due to Tsunamis</i>		
Action 7.D.1	Become a Tsunami Ready City	

Goal 8: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and State-owned facilities, due to <u>dam failure</u>.		Applies to New, Existing or Both
<i>Objective 8.A: Develop a comprehensive approach to reducing the possibility of damage and losses due to dam failure.</i>		
Action 8.A.1	This action items for Goal 7 also apply to these objectives.	
<i>Objective 8.B: Protect existing assets with the highest relative vulnerability to the effects of dam failure.</i>		
Action 8.B.1	This action items for Goal 7 also apply to these objectives.	

Goal 9: Reduce the possibility of damage and losses to existing assets, particularly people, critical facilities/infrastructure, and City-owned facilities, due to <u>geological hazards</u>.		Applies to New, Existing or Both
<i>Objective 9.A: Develop a comprehensive approach to reducing the possibility of damage and losses due to geological hazards.</i>		
Action 9.A.1	Maintain construction in fault zones	
Action 9.A.2	Ensure all development in fault zones avoids or withstands geological hazards	
<i>Objective 9.B: Protect existing assets with the highest relative vulnerability to the effects of geological hazards.</i>		
Action 9.B.1	Confirm building standards for new and existing buildings for geological hazards	
<i>Objective 9.C: Address identified data limitations regarding the lack of information about the relative vulnerability of assets from earthquakes (e.g., data on structure/building types, reinforcements, etc.).</i>		

1.1.5 Prioritization and Implementation of Action Items

Once the comprehensive list of jurisdictional goals, objectives, and action items listed above was developed, the proposed mitigation actions were prioritized. This step resulted in a list of acceptable and realistic actions that address the hazards identified in each jurisdiction. This prioritized list of action items was formed by the LPG weighing STAPLEE criteria

The Disaster Mitigation Action of 2000 (at 44 CFR Parts 201 and 206) requires the development of an action plan that not only includes prioritized actions but one that includes information on how the prioritized actions will be implemented. Implementation consists of identifying who is responsible for which action, what kind of funding mechanisms and other resources are available or will be pursued, and when the action will be completed.

The prioritized actions below reflect progress in local mitigation efforts as well as changes in development.

The top 8 prioritized mitigation actions as well as an implementation strategy for each are:

Action Item # 1: Increase and enhance EOC Operations
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Fire Department Budget
Implementation Timeline: On-going - Completed through training

Action Item # 2: Continue to support and maintain Community emergency Response Team (CERT) Program
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Fire Department Budget
Implementation Timeline: On-going

Action Item # 3: Continue to develop pre-incident plan to mitigate hazards and maximize response
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Fire Department Budget
Implementation Timeline: On-going

Action Item # 4: Continue to participate in the Multi-Jurisdiction Hazard Mitigation Plan planning process. Implement as much of the plan as practical
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Emergency Preparedness Department Budget
Implementation Timeline: January 2016 – December 2020

Action Item # 5: Use an the City Website to educate the public
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Fire Department Budget
Implementation Timeline: On-going

Action Item # 6: NIMS/SEMS/ICS training for city personnel
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Coronado Fire Department Budget
Implementation Timeline: On-going

Action Item # 7: Participate in the Regional Exercise and Training Program
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Grant Funds
Implementation Timeline: Annual, on-going

Action Item # 8: Update Emergency Preparedness guidelines for the City of Coronado
Coordinating Individual/Organization: Fire Department
Potential Funding Source: Funding sources not identified at this time

Implementation Timeline: On-going