



# P. Hazard Mitigation & Disaster Preparedness

### Goals

- A city and region that, through diligent planning, organizing, and training is able to prevent, respond to, and recover from man-made and natural disasters.
- Reduced disruptions in the delivery of vital public and private services during and following a disaster.
- Prompt and efficient restoration of normal City functions and activities following a disaster.
- A resilient and sustainable community achieved through equity, environment, economy, and governance.

### **Discussion**

Many natural and man-made events and processes carry the risk of hazard to life and property. Natural hazards arise from a community's many physical relationships to the natural environment. Hazard risk also results from human-caused intentional acts and disruption or failure of technology. A resilient community has the capacity to maintain critical functions during hazard events as well as adapt to and reduce future hazard risks.

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to life and property from hazard events. An effective response to natural and human-caused disasters requires planning, education, coordination and training by multiple government agencies and the public.

San Diego's location within a seismically active coastal region with a semi-arid climate creates potential sources of natural environmental hazards. Significant hazard risks occur due to earthquakes, landslides, wildland fires, and flooding. Climate variability, such as periodic droughts and high volume rain events, increase hazard risks. The San Diego region, as like the state of California, relies on relatively vast infrastructure and higher technological inputs to sustain daily life and the region's economy. Failure of this infrastructure can therefore cause significant disruption and disconnection of necessary public and private services.

# Climate Adaptation

San Diego's Climate Action Plan (CAP) provides measures to reduce human-caused greenhouse gas emissions and enhance carbon storage, or sequestration, as a local



response to mitigate global climate change and comply with state and federal legislation (also see the Conservation Element Discussion on Climate Change).

Some degree of climate change will occur regardless of the City's effort to reduce and mitigate greenhouse gas emissions. The City will need to adapt to these changes within the context of the community's environmental and socioeconomic system. Extreme heat, extreme rainfall and drought, wildfires, and sea level rise are the four primary climate change related hazards that are projected to impact the City and intensify over time. Exposure to these hazards can potentially result in multiple negative effects on public health and safety, such as reduced air quality or flood risk. To address these climate change related hazards, the City has completed three vulnerability assessments: a State Lands Sea Level Rise Vulnerability Assessment, Sea Level Rise Vulnerability Assessment, and Citywide Climate Change Hazard Vulnerability Assessment. These vulnerability assessments identify the risks that the four primary climate change hazards pose to the City, including the geographic extent of the hazard, based on best available science. The vulnerability assessments identify at-risk locations, inventory assets and resources exposed to the climate change hazards, and determine the ability of the asset or resource to withstand the impacts of the climate change hazard.

Based upon the findings of the Citywide Climate Change Hazard Vulnerability Assessment, the City developed *Climate Resilient SD*, a comprehensive adaptation and resilience plan. *Climate Resilient SD* includes a set of adaptation and resilience goals, policies, and objectives to:

- a) <u>Protect communities</u>, especially those most vulnerable to climate change hazards,
- b) Avoid or minimize the impacts of climate change hazards associated with new land uses,
- c) Locate, when feasible, new essential public facilities outside of at-risk areas,
- d) <u>Designate adequate and feasible infrastructure located in at risk areas,</u>
- e) Work cooperatively with relevant local, regional, state, and federal agencies, and
- f) <u>Identify the use and prioritization of natural infrastructure for adaptation projects when feasible.</u>

<u>Climate Resilient SD</u> is a plan not only to prepare for climate change but also to improve the lives of people that live in our City. To this end, the plan identifies core benefits that can be achieved through implementation of various climate change adaptation strategies.



Community resilience is maintaining desired socio-ecological functions when relatively sudden changes occur through implementation of adaptation practices that can reduce vulnerability of human and wildlife populations. Forecasted effects to San Diego from climate change include increased temperatures, precipitation extremes (more severe periods of drought and flooding), and rising sea levels. Exposure to these events can leave a community vulnerable to an increased rate of wildland fires, flooding, coastline erosion, reduced air quality, availability of fresh water, and negative impacts on wildlife. All of these effects can potentially generate multiple concomitant effects on public health and safety.

## Hazard Mitigation Planning

The City participates in the San Diego County's Multi-Jurisdictional Hazard Mitigation Plan. The countywide plan identifies risks posed by natural and manmade disasters including fires, earthquakes, landslides, and floods and ways to minimize damage from those disasters. The plan serves many purposes, including enhancing public awareness and understanding, creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. The federal government requires all local governments to create such a disaster plan in order to qualify for disaster relief funding.

The State requires local jurisdictions to integrate climate adaptation into the general plan to support the State's overall climate adaptation strategy. The City will develop climate resiliency and adaptation strategies and has developed the *Climate Resilient SD* plan to meet State requirements and to provide a comprehensive framework for climate adaptation and resilience action. The City will continue to work with stakeholders on amendments to San Diego County's Multi-Jurisdictional Hazard Mitigation Plan to address this issue.

Land use planning, implemented through the City's municipal code, is an important component of hazard mitigation. Site selection that avoids proximity to natural hazards or hazardous facilities, and building construction techniques designed for fire protection, life safety and temporary systems failure, can reduce hazard risks within the built environment.



# Disaster Preparedness

The City's disaster preparedness program emphasizes the prevention of, response to, and recovery from natural, technological, and man-made disasters including acts of terrorism. The program is designed to improve the City's ability to protect employees, the community, and the environment; and to enhance its ability to recover from financial losses, regulatory fines, damages to facilities or equipment, and other impacts on service delivery or business continuity.

Prevention of disasters addresses prevention, mitigation, and educational activities which reduce or eliminate a threat, or reduce its impact on life, health, and property. The response efforts incorporate the functions of planning, training, exercising, and execution and are conducted in accordance with U.S. Department of Homeland Security Office of Domestic Preparedness requirements. In the event of a disaster, recovery efforts, including Local Assistance Center (LAC) operations, are generally oriented toward activities that focus on returning to normalcy after an event. Key to recovery is the process of identifying critical services and their dependencies on infrastructures such as buildings, power, communications, and data systems.

The City's disaster preparedness efforts also include oversight of the City's Emergency Operations Center (EOC). The effort is responsible for maintaining the EOC in a continued state of readiness, training City staff and outside agency representatives in their roles

All emergency responders and **Emergency Operation Center** (EOC) and Department Operation Centers (DOC) operate under the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS). NIMS provides a consistent, flexible, and adjustable national framework within which Federal, State, territorial, tribal, and local governments can work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of their cause, size, location, or complexity. NIMS is required by Homeland Security Presidential Directive (HSPD)-5. SEMS, which integrates NIMS, is intended for managing response to multi-agency and multijurisdiction emergencies in California and is required by Government Code §8607(a).

and responsibilities, and coordinating EOC operations when activated in response to an emergency or major event/incident. Additionally, the City is responsible for the development and maintenance of emergency operational documents and guides for City facilities, Qualcomm Stadium, Petco Park, and potential major events or incidents.

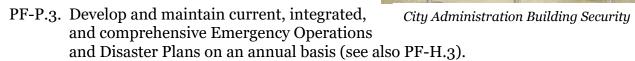
National and international events continue to focus attention on homeland security and public safety issues. The City is coordinating efforts to improve staff's ability to manage vital information and limited resources during a major emergency such as an earthquake, chemical spill, or act of terrorism, through the use of technology. The City is also responsible for securing and managing homeland security and other grant funds



to enhance its, and the region's, security and overall preparedness to prevent, respond to, and recover from any hazard whether natural or man-made.

### **Policies**

- PF-P.1. Ensure operational readiness of the City's EOC.
- PF-P.2. Establish communications with all City elected officials and managers regarding Office of Homeland Security issues.



- a. Prepare and maintain a comprehensive multi-modal evacuation plan.
- PF-P.4. Coordinate the development and implementation of a City business continuity plan to ensure the continuity of operations and government in the event of a major disaster or emergency.
- PF-P.5. Ensure that citywide guidelines for Operational Conditions (OPCON) are aligned with the U.S. Department of Homeland Security and integrated into each City department's procedures and Emergency Operations Plans.
- PF-P.6. Coordinate citywide emergency management and disaster planning and response through the integration of key City departments into the preparedness and decision-making process.
- PF-P.7. Develop a comprehensive exercise program consistent with the U.S. Department of Homeland Security Office of Domestic Preparedness requirements.
- PF-P.8. Coordinate with other urban area jurisdictions to execute a variety of exercises to test operational and emergency plans.
- PF-P.9. Collaborate with other local, regional, state, and/or federal jurisdictions and private entities to plan and promote the integration and improvement of regional response capabilities.
- PF-P.10. Facilitate the execution of the City's Community Emergency Response Team (CERT) program to meet the requirements set forth by the Emergency



- Preparedness and Response directorate of the U.S. Department of Homeland Security and the San Diego Citizen's Corps Council.
- PF-P.11. Ensure that disaster recovery efforts involving the disposal of materials adhere to the policies in Section I of this element.
- PF-P.12. Develop, implement, and sustain a robust disaster preparedness community outreach and education program.
- PF-P.13.As part of the community plan update process, update plans and zoning to limit future development in hazard areas.
- PF-P.14.Continue to participate in and implement the San Diego County Multi-Jurisdictional Hazard Mitigation Plan to further coordinate hazard mitigation planning on a regional level.
- PF-P.15 Collaborate with local, regional, state and/or federal jurisdictions and agencies on climate resiliency and adaptation strategies policies and programs.
- PF-P.16 Develop a climate resiliency plan that Continue to address the effects of climate change as set forth in *Climate Resilient SD*, a comprehensive climate adaptation and resilience plan that integrates and builds upon the applicable strategies identified in the General Plan and Climate Action Plan.
- PF-P.17 Monitor climate change-related effects with local, regional, state, and/or federal partners to provide information about the effectiveness of existing infrastructure and programs.