

5 Capability Assessment

This section discusses the capability of Monroe County to implement hazard mitigation activities. It consists of the following four subsections:

- 5.1 Overview
- 5.2 Conducting the Capability Assessment
- 5.3 Capability Assessment Findings
- 5.4 Conclusions on Local Capability

5.1 OVERVIEW

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy, and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs, or projects. As in any planning process, it is important to try to establish which goals, objectives, and actions are feasible, based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps to determine which mitigation actions are practical and likely to be implemented over time given a local government’s planning and regulatory framework, level of administrative and technical support, amount of fiscal resources, and current political climate.

The capability assessment completed for the Monroe County planning area serves as a critical planning step toward developing an effective mitigation strategy. Coupled with the risk assessment, the capability assessment helps identify and target effective goals, objectives, and mitigation actions that are realistically achievable under given local conditions.

To facilitate the inventory and analysis of local government capabilities within the planning area, a detailed Local Data Collection Guide was distributed to members of the LMSWG after the first planning committee meeting. The survey questionnaire requested information on a variety of “capability indicators” such as existing local plans, policies, programs, or ordinances that contribute to and/or hinder the region’s ability to implement hazard mitigation actions. Other indicators included information related to the County’s fiscal, administrative, and technical capabilities, such as access to local budgetary and personnel resources for mitigation purposes. Communities were also asked to comment on the current political climate with respect to hazard mitigation, an important consideration for any local planning or decision-making process.

At a minimum, the survey results provide an extensive and consolidated inventory of existing local plans, ordinances, programs, authorities, and resources in place or under development. With this information, inferences can be made about the overall effect on hazard loss reduction in each community.

5.2 CAPABILITY ASSESSMENT FINDINGS

The findings of the capability assessment are summarized in this plan to provide insight into the relevant capacity of Monroe County and its incorporated municipalities to implement hazard mitigation activities. Information is based upon input provided by community representatives on the LMSWG through a local capability self-assessment as well as research conducted by the planning consultant. Some jurisdiction representatives did not provide capability information for their communities; in these cases, information was based on research and on the existing Monroe County Local Mitigation Strategy.

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5.2.1 Planning and Regulatory Capability

Planning and regulatory capability is based on the implementation of plans, ordinances, and programs that demonstrate a local jurisdiction’s commitment to guiding and managing growth, development, and redevelopment in a responsible manner, while maintaining the general welfare of the community. It includes emergency response and mitigation planning, comprehensive land use planning, and transportation planning. Regulatory capability also includes the enforcement of zoning or subdivision ordinances and building codes that regulate how land is developed and structures are built, as well as protecting environmental, historic, and cultural resources in the community. Although some conflicts can arise, these planning initiatives generally present significant opportunities to integrate hazard mitigation principles and practices into the local decision-making process.

This assessment is designed to provide a general overview of the key planning and regulatory tools or programs in place or under development for the Monroe County planning area, along with their potential effect on loss reduction. This information will help identify opportunities to address gaps, weaknesses, or conflicts with other initiatives and integrate the implementation of this plan with existing planning mechanisms where appropriate.

Table 5.1 provides a summary of the relevant local plans, ordinances, and programs already in place or under development for the Monroe County planning area. A checkmark (✓) indicates that the given item is currently in place and being implemented. A plus sign (+) indicates that a jurisdiction is covered for that item under a county-implemented version. Each of these local plans, ordinances, and programs should be considered available mechanisms for incorporating the requirements of the Local Mitigation Strategy.

Table 5.1 – Relevant Plans, Ordinances, and Programs

	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
Plan/Ordinance						
Local Mitigation Strategy	✓	✓	✓	✓	✓	✓
Comprehensive Plan	✓	✓	✓	✓	✓	✓
Land Use Plan	✓	✓	✓	✓	✓	✓
Zoning Ordinance	✓	✓	✓	✓	✓	✓
Subdivision Ordinance	✓		✓	✓	✓	✓
Floodplain Ordinance	✓	✓	✓	✓	✓	✓
Erosion, Sedimentation, and Pollution Control ordinance		✓	✓	✓	✓	✓
Other Special Purpose Ordinance (stormwater, growth management, wildfire)	✓	✓	✓	✓	✓	✓
Building Code	✓	✓	✓	✓	✓	✓
Fire department ISO Rating	3	3	1	3		2
Building Code Effectiveness Grading Schedule Rating	4/4	5+	4	3	3/3	4/3
Stormwater Management Program		✓	✓	✓		✓

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	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
Site Plan Review Requirements	✓	✓	✓	✓	✓	✓
Capital Improvements Plan	✓	✓	✓	✓	✓	✓
Economic Development Plan				✓		
Local Emergency Operations Plan	✓	✓	✓	✓		✓
Flood Insurance Study or Other Engineering Study for Streams	✓	+	+	+	+	+
Other Special Plans	✓	✓			✓	
Elevation Certificates	✓	✓	✓	✓	✓	✓

Note: ✓ = item is currently in place and being implemented; + = jurisdiction is cover under county-implemented version

Other plans available within the communities include: transportation plans (Monroe County), repetitive loss area analysis (Monroe County), Stormwater Management Master Plan (Monroe County), Sea Level Rise Study (Monroe County), Sustainability and Climate Plan (City of Marathon), Historic Preservation Plan (City of Marathon), among others.

Other special purpose ordinances in place within the County and incorporate jurisdictions include: Emergency Management and Emergency Services, Environment/Natural Resources Protection, Fire Prevention and Protection, Utilities, and Stormwater ordinances.

Based upon the responses summarized in the above table, jurisdictions in Monroe County have significant planning and regulatory capability. Jurisdictions could improve this capability by creating economic development plans that incorporate post-disaster economic recovery. Beyond the planning and regulatory tools listed above, communities in the County could increase their resilience to hazards through local post-disaster recovery plans.

A more detailed discussion on the region’s planning and regulatory capability follows.

5.2.1.1 Plans and Ordinances

Hazard mitigation is widely recognized as one of the four primary phases of emergency management. Mitigation is interconnected with all other phases and is an essential component of effective preparedness, response, and recovery. Opportunities to reduce potential losses through mitigation practices are most often implemented before a disaster event, such as through the elevation of flood-prone structures or by regular enforcement of policies that regulate development. However, mitigation opportunities can also be identified during immediate preparedness or response activities, such as installing storm shutters in advance of a hurricane. Furthermore, incorporating mitigation during the long-term recovery and redevelopment process following a disaster event is what enables a community to become more resilient.

The implementation of hazard mitigation activities also often involves agencies and individuals beyond the emergency management profession. Stakeholders may include local planners, public works officials,

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economic development specialists, and others. In many instances, concurrent local planning efforts will help to achieve or complement hazard mitigation goals, even though they may not be designed as such.

The following defines some of the different plans and ordinances available to Monroe County and its incorporated jurisdictions to implement hazard mitigation.

Local Mitigation Strategy

A local mitigation strategy is a community's blueprint for how it intends to reduce the impact of natural, and in some cases human-caused, hazards on people and the built environment. The essential elements of a hazard mitigation plan include a risk assessment, capability assessment, and mitigation strategy.

All participating jurisdictions in this regional planning effort have previously been covered by the 2015 Monroe County and Incorporated Municipalities Local Mitigation Strategy and continue to be covered under this update – making each community eligible for the associated hazard mitigation funding mechanisms.

Comprehensive/Land Use Plan

A comprehensive land use plan, or general plan, establishes the overall vision for what a community wants to be and serves as a guide for future governmental decision making. Typically, a comprehensive plan contains sections on demographic conditions, land use, transportation elements, and community facilities. Given the broad nature of the plan and its regulatory standing in many communities, the integration of hazard mitigation measures into the comprehensive plan can enhance the likelihood of achieving risk reduction goals, objectives, and actions. All participating jurisdictions have a comprehensive plans and land use mapping in place. Regular updates of comprehensive plans are important for guiding the growth and development of a community. Monroe County's was most recently updated in 2019, and Islamorada's in 2017. Other jurisdictions have not updated their plans as recently.

Given the precarious location of the Florida Keys, addressing mitigation in comprehensive plans is paramount. In fact, each jurisdiction has multiple goals, objectives, or policies that directly address mitigating hazard impacts in the uniquely vulnerability Keys. Details on the specific policies included in each community's planning efforts are included in the individual jurisdictional annexes.

Zoning Ordinance

Zoning represents the primary means by which land use is controlled by local governments. As part of a community's police power, zoning is used to protect the public health, safety, and welfare of those in a given jurisdiction that maintains zoning authority. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable municipal governments to limit the type and density of development, a zoning ordinance can serve as a powerful tool when applied in identified hazard areas. All participating jurisdictions have a zoning ordinance in place.

Subdivision Ordinance

A subdivision ordinance is intended to regulate the development of residential, commercial, industrial, or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development. All participating jurisdictions except for Key Colony Beach have a subdivision ordinance in place.

Building Codes, Permitting, and Inspections

Building codes regulate construction standards. In many communities, permits and inspections are required for new construction. Decisions regarding the adoption of building codes (that account for hazard

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risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community. All participating jurisdictions have building codes in place.

Each jurisdiction requires all new building plans submitted comply with the 6th edition of the Florida Building Code (FBC). The State of Florida first mandated statewide building codes in the 1970s; in the 1990s, a series of natural disasters coupled with changing building construction regulation necessitated a comprehensive review of the state building code system. In that same timeframe, the Florida Legislature created a single zoning code to be enforced by local governments. By 2002, it was mandated that the *Florida Building Code* supersede all local codes. The Code, which is developed and maintained by the Florida Building Commission, is updated every three years, but may be amended annually. As such, an 2020 update is in progress. The Code includes nine main volumes – including the *Florida Building Code*, *Test Protocols for High-Velocity Hurricanes*. The Code also has Flood Resistant Provisions included in four of the nine volumes.

The adoption and enforcement of building codes by local jurisdictions is routinely assessed through the Building Code Effectiveness Grading Schedule (BCEGS) program, developed by the Insurance Services Office, Inc. (ISO). The results of BCEGS assessments are routinely provided to ISO's member private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. The expectation is that communities with well-enforced, up-to-date codes should experience fewer disaster-related losses, and as a result should have lower insurance rates.

Capital Improvements Plan

A capital improvements plan guides the scheduling of spending on public improvements. A capital improvements plan can serve as an important mechanism for guiding future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments. Capital improvement plans can also address problems within hazardous areas; for example, a jurisdiction might obligate money to address site-specific drainage related problems. All participating jurisdictions have a capital improvements plan or program in place.

Emergency Operations Plan

An emergency operations plan outlines the responsibilities of different departments and how resources will be deployed during and following an emergency or disaster. All jurisdictions except the City of Marathon have an emergency operations plan.

Stormwater Management Plan

A stormwater management plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding. Currently, all jurisdictions except for Monroe County and the City of Marathon have a stormwater management program or plan.

5.2.1.1 Floodplain Management

Flooding represents the greatest natural hazard facing the nation, yet the tools available to reduce the impacts associated with flooding are among the most developed when compared to other hazard-specific mitigation techniques. In addition to approaches that cut across hazards such as education, outreach, and the training of local officials, the National Flood Insurance Program (NFIP) contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments; however, program participation is

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strongly encouraged by FEMA as a first step for implementing and sustaining an effective hazard mitigation program. It is therefore used as part of this capability assessment as a key indicator for measuring local capability.

In order for a county or municipality to participate in the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings be protected from damage by a 100-year flood event, and that new development in the floodplain not exacerbate existing flood problems or increase damage to other properties.

A key service provided by the NFIP is the mapping of identified flood hazard areas. Once completed, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices, and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials, and the private sector about the likelihood of flooding in their community.

Table 5.2 provides NFIP policy and claim information for each participating jurisdiction in the Monroe County planning area.

All jurisdictions in the County participate in the NFIP and will continue to comply with all required provisions of the program. Floodplain management is managed through zoning ordinances, building code restrictions, and the county and municipal building inspection programs. The jurisdictions will coordinate with FDEM and FEMA to develop maps and regulations related to Special Flood Hazard Areas within their jurisdictional boundaries and, through a consistent monitoring process, will design and improve their floodplain management program in a way that reduces the risk of flooding to people and property.

The communities in Monroe County have incorporated various actions to continue to maintain NFIP compliance, and in some instances go above and beyond stated requirements. Where applicable, these actions can be found in each community's individual annex.

Community Rating System

An additional indicator of floodplain management capability is active participation in the Community Rating System (CRS). The CRS is an incentive-based program that encourages communities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP. Each of the CRS mitigation activities is assigned a point value. As a community earns points and reaches identified thresholds, they can apply for an improved CRS class. Class ratings, which range from 10 to 1 and increase on 500-point increments, are tied to flood insurance premium reductions. Every class improvement earns an additional 5 percent discount for NFIP policyholders, with a starting discount of 5 percent for Class 9 communities and a maximum possible discount of 45 percent for Class 1 communities.

Community participation in the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply to FEMA for a CRS classification better than class 10. The CRS application process has been greatly simplified over the past several years, based on community comments intended to make the CRS more user friendly, and extensive technical assistance available for communities who request it. All jurisdictions involved in this plan participate in the CRS. Table 5.2 also includes each community's CRS entry date and current CRS class.

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Table 5.2 – NFIP Policy and Claim Information

Jurisdiction	Date of Initial FIRM or FHBM	CRS Entry	CRS Class	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Written Premium in Force	Closed Losses	Total Payments
Monroe County	06/20/70	2016	5	02/18/05	14,390	\$3,538,513,900	\$16,399,794	16,754	\$286,690,897
City of Key Colony Beach	06/20/70	1992	7	02/18/05	1,117	\$253,525,900	\$1,479,152	902	\$40,629,797
City of Key West	09/03/71	2016	5	02/18/05	8,058	\$2,121,695,200	\$12,113,673	5,319	\$189,725,711
City of Layton	07/01/70	2001	6	02/18/05	101	\$28,056,300	\$145,058	88	\$3,663,828
City of Marathon	06/20/70	2017	6	02/18/05	3,911	\$936,938,700	\$5,548,750	2,701	\$111,310,132
Village of Islamorada	06/20/70	2015	6	02/18/05	3,647	\$981,546,000	\$5,173,400	1,051	\$49,324,843
TOTAL PLAN	-		-	-	\$31,224	\$7,860,276,000	\$40,859,827	\$26,815	\$681,345,208

Source: FEMA NFIP Policy Statistics via FEMA CIS, July 2020

5.2.2 Administrative and Technical Capability

The ability of a local government to develop and implement mitigation projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capability can be evaluated by determining how mitigation-related activities are assigned to local departments and if there are adequate personnel resources to complete these activities. The degree of intergovernmental coordination among departments will also affect administrative capability for the implementation and success of proposed mitigation activities.

Technical capability can generally be evaluated by assessing the level of knowledge and technical expertise of local government employees, such as personnel skilled in using GIS to analyze and assess community hazard vulnerability. Input from the County and individual municipalities and research done by the consultants was used to capture information on administrative and technical capability through the identification of available staff and personnel resources.

Error! Reference source not found. provides a summary of the results for the region with regard to relevant staff and personnel resources. A checkmark (✓) indicates the presence of a staff member(s) in that jurisdiction with the specified knowledge or skill.

Note that in multiple instances, one individual staff member fills multiple roles listed below. In these cases, these individuals may be overburdened during emergency events, disaster recovery, or planning process updates. Certain communities might contract out services where there is no in-house capacity. Monroe County assists communities lacking certain capabilities. Specific areas for improvement might include individual communities maintaining GIS databases to identify hazard prone areas and build community-specific, detailed risk and vulnerability assessments.

Table 5.3 – Relevant Staff/Personnel/Data Resources

	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
Staff/Personnel/Data Resources						
Planner/Engineer with knowledge of land development/land management practices	✓	✓	✓	✓	✓	✓
Engineer/Professional trained in construction practices related to buildings and/or infrastructure	✓	✓	✓	✓	✓	✓
Planner/Engineer/Scientist with an understanding of natural hazards	✓	✓	✓	✓	✓	✓
Personnel skilled in GIS	✓		✓	✓	✓	✓
Full time Building Official	✓	✓	✓	✓	✓	✓
Floodplain Manager	✓	✓	✓	✓		✓
Emergency Manager	✓	✓	✓	✓	✓	✓
Grant Writer	✓	✓	✓			✓
Public Information Officer	✓		✓	✓		✓
Warning Systems	✓	✓	✓			✓

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	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
GIS data: flood zones/hazard areas	✓		✓			✓
GIS data: critical facilities	✓		✓			✓
GIS data: current and/or future land use	✓		✓			✓
GIS data: building footprints	✓		✓			✓
GIS data: links to Assessor’s data	✓		✓			✓
Other personnel	✓		✓			
Other data			✓			

5.2.3 Fiscal Capability

The ability of a local government to implement mitigation actions is often dependent on the amount of money available. This may take the form of outside grant funding awards or locally based revenue and financing. The costs associated with mitigation policy and project implementation vary widely. In some cases, policies are tied primarily to staff time or administrative costs associated with the creation and monitoring of a given program. In other cases, direct expenses are linked to an actual project such as the acquisition of flood-prone houses, which can require a substantial commitment from local, state, and federal funding sources.

The information collected from jurisdictions and the County was used to capture information on the County’s fiscal capability through the identification of locally available financial resources.

Table 5.4 provides a summary of the results for the County with regard to relevant fiscal resources. A checkmark indicates that the given fiscal resource is locally available for hazard mitigation purposes (including match funds for state and federal mitigation grant funds).

Table 5.4 – Relevant Fiscal Resources

	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
Fiscal Resources						
Community Development Block Grants	✓	✓	✓	✓	✓	✓
Capital Improvement Project Funding	✓	✓	✓	✓	✓	✓
Authority to levy taxes for specific purposes	✓	✓	✓	✓	✓	✓
Fees for water, sewer, gas, or electric services		✓	✓		✓	✓

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	Monroe County	City of Key Colony Beach	City of Key West	City of Layton	City of Marathon	Islamorada Village of Islands
Impact fees for new development	✓	✓	✓		✓	✓
Incur dept through general obligation bonds	✓	✓	✓	✓	✓	✓
Incur debt through special tax bonds	✓	✓	✓	✓		✓
Incur dept through private activities	✓	✓				✓
Withhold spending in hazard prone areas	✓	✓	✓			✓
Other				✓		

5.2.4 Education and Outreach Capability

This type of local capability refers to education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information. Examples include natural disaster or safety related school programs; participation in community programs such as Firewise or StormReady; and activities conducted as part of hazard awareness campaigns such as a Tornado Awareness Month. The following is a brief list of education and information programs within each community:

- ▶ **Monroe County:** Hosts the County’s CRS Program for Public Information and the associated Committee (all jurisdictions except for Layton participate in this PPI as of the December 2019 Annual Evaluation); Currently working toward StormReady certification; Emergency management preparedness website.
- ▶ **City of Key Colony Beach:** Participate in StormReady Program; distribute flyers to the community with topics related to water preservation, hurricane preparedness and flood preparedness.
- ▶ **City of Key West:** Outreach and education through booths, work/school visits, PSA’s, and online videos on topics including, but not limited to, fire and hurricane safety, lightning, water conservation, energy conservation, and climate change; annual mailing to repetitive loss properties; Know before you buy brochures; Annual flood information mailing to lenders, insurance agents, and realtors.
- ▶ **Layton:** Community mailouts on hazard related topics.
- ▶ **Marathon:** Emergency Management website with preparedness guides.
- ▶ **Islamorada:** Public education trailer for community and school outreach, especially around home fires; Outreach with FKAA around water conservation; Maintains a Community Emergency Response Team (CERT); Assist with MERC programs which incorporate storm readiness, home readiness, mitigation, and response.

Although this is not an all-encompassing list, the County and incorporated jurisdictions have significant hazard and non-hazard related educational and outreach capacity. The communities can further capitalize on their existing capabilities, like school partnerships and educational vehicles, to educate the larger community on hazard risk and mitigation options.

5.2.5 Political Capability

One of the most difficult capabilities to evaluate involves the political will of a jurisdiction to enact meaningful policies and projects designed to reduce the impact of future hazard events. Hazard mitigation may not be a local priority, or it may conflict with or be seen as an impediment to other goals of the community, such as growth and economic development. Therefore, the local political climate must be considered in designing mitigation strategies, as it could be the most difficult hurdle to overcome in accomplishing their adoption and implementation. Table 5.5 below summarizes the different government structures in the jurisdictions as well as whether or not the governing bodies are supportive of mitigation efforts.

Table 5.5 – Jurisdictional Government Structure and Political Climate

Jurisdiction	Government Structure	Political Climate Supportive of Mitigation Efforts?
Monroe County	5-member Board of County Commissioners	Yes, supportive via resolution
City of Key Colony Beach	5-member City Commission led by Mayor	Yes.
City of Key West	City Commission of 7 (6 district representatives, 1 Mayor)	Local political climate is very supportive of mitigation efforts.
City of Layton	5 member elected City Council and 1 elected Mayor	Mitigation is supported by Mayor, Council, and staff.
City of Marathon	5-member City Council (3 council members, 1 vice mayor, 1 mayor)	Yes.
Islamorada Village of Islands	Islamorada operates under a council-manager form of government; 5-member Village Council (including Mayor)	Mayor and Village Council are very supportive of mitigation efforts in Islamorada.

5.3 CONCLUSIONS ON LOCAL CAPABILITY

As previously discussed, one of the reasons for conducting a capability assessment is to examine local capabilities to detect any existing gaps or weaknesses within ongoing government activities that could hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. These gaps or weaknesses have been identified, for each jurisdiction, in the tables found throughout this section. The participating jurisdictions used the capability assessment as part of the basis for the mitigation actions that are identified in Section 7; therefore, each jurisdiction addresses their ability to expand on and improve their existing capabilities through the identification of their mitigation actions. Each jurisdiction is unique in its planning, regulatory, fiscal, political, and outreach capabilities; additional details on jurisdictional capability, including existing mitigation in comprehensive planning efforts, and other details of local planning can be found in individual jurisdictional annexes.