



3 Planning Process

44 U.S. Code of Federal Regulations Requirements §201.6 Local Mitigation Plans (b) and §201.6(c)(1): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

- 1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*
- 2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and nonprofit interests to be involved in the planning process; and*
- 3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*

[The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

3.1 Background on Mitigation Planning in the City of Petaluma

This multi-hazard, single-jurisdiction Local Hazard Mitigation Plan (LHMP) Update is a revised, detailed plan tailored for the City of Petaluma. The City's previous plan, "Taming Natural Hazards," adopted in 2005, was a regional, multi-jurisdictional LHMP for all nine counties within the Bay Area prepared on behalf of the City by the Association of Bay Area Governments (ABAG). The City annexed the regional plan in 2010 which has since expired in 2015. ABAG is no longer managing the update of the multi-jurisdictional LHMP which requires the City to create a single-jurisdiction update to the plan.

The increasing cost of disaster recovery in the nation and the State of California over the past decades, and specifically from the recent wildfires in 2017 and in 2019, has prompted a renewed interest in determining effective and holistic approaches to minimize natural hazards. Hazard mitigation planning plays an important role in building community resilience through the identification of hazards, assessment of vulnerabilities, and the development of mitigation actions. The City of Petaluma recognized the importance of developing a new, updated LHMP and was responsible for initiating its development in 2019. The goal of the LHMP is to develop practical, attainable, and cost-effective mitigation actions to reduce vulnerability to the identified hazards and reduce human, property, and economic losses from hazard events. The City contracted with Wood Environment & Infrastructure Solutions, Inc. (Wood) to facilitate and develop the plan. Wood's role was to:

- Assist in establishing the Hazard Mitigation Planning Committee (HMPC) as defined by the Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390) commonly known as the 2000 Stafford Act Amendments;
- Meet the DMA requirements as established by federal regulations and follow the Federal Emergency Management Agency (FEMA) planning guidance;
- Facilitate the entire planning process based on a Community Engagement Strategy;
- Identify the data requirements for the HMPC and conduct the research and documentation necessary to augment that data;
- Perform risk assessments that identify, evaluate, and prioritize natural and human-caused hazards that could impact the City;





- Conduct a vulnerability assessment to identify the hazard’s impacts on the City’s critical facilities, infrastructure, property, and future development;
- Assist in facilitating the public input process;
- Integrate the risk and vulnerability assessment to help the City determine appropriate mitigation goals and objectives to minimize long-term vulnerabilities to the identified hazards;
- Produce draft and final plan documents; and
- Coordinate with California Office of Emergency Services (Cal OES) and FEMA Region IX plan reviews.

The original plan developed by ABAG broadly covered natural hazards and vulnerabilities in the City of Petaluma. This new, updated plan expands on the multi-jurisdictional LHMP and is tailored to address the natural and human-caused hazards in the City, the identified hazard impacts specific to Petaluma’s critical facilities and infrastructure, and the development of a locally attainable mitigation strategy. The new LHMP will involve adopting, implementing, assigning responsibility, monitoring, and reviewing the mitigation actions over time to ensure the goals and objectives of the plan are being achieved and the plan remains relevant. The remainder of this chapter provides a narrative of the steps taken to prepare the LHMP.

3.2 Local Government Participation

The LHMP Update is a single-jurisdictional plan that covers the City of Petaluma Planning Area, which is the same boundary as the City’s Urban Growth Boundary (UGB). The DMA planning regulations and guidance stress that each local government seeking FEMA approval of their mitigation plan must participate in the planning effort in the following ways:

- Participate in the process as part of the HMPC
- Identify potential mitigation actions; and
- Formally adopt the plan.

For the City of Petaluma’s HMPC, “participation” was defined at the outset of the planning process as the following:

- Providing facilities for meetings;
- Attending and participating in the HMPC meetings;
- Completing and returning the Wood Environment & Infrastructure Solutions, Inc. Data Collection Guide;
- Collecting and providing other requested data (as available);
- Managing administrative details;
- Engaging stakeholders and facilitating a formal Stakeholder’s Workshop;
- Making decisions on plan process and content;
- Identifying mitigation actions for the plan;
- Reviewing and providing comments on plan drafts;



- Informing the public, local officials, and other interested parties about the planning process and providing opportunity for them to comment on the plan;
- Advertising, coordinating, and participating in the public input process; and
- Coordinating the formal adoption of the plan by the City Council.

The City of Petaluma met all FEMA's requirements for plan participation. The City brought together a local planning team with representatives from each City of Petaluma department to help collect data, identify mitigation actions and implementation strategies, and review and provide data on plan drafts. The City engaged several federal, state, regional, and local stakeholder representatives from various agencies and municipalities in the region. In most cases, one or more representatives from each City department and each agency attended the HMPC meetings described in Table 3-2.

The preparation of the updated LHMP was also intended to assist the City of Petaluma in reducing its risk from natural and man-made hazards by identifying resources, information, and strategies for risk reduction. For the City's HMPC, the intention of the plan is to help guide and coordinate mitigation activities throughout the City's various departments, as this is their first stand-alone LHMP since the multi-jurisdictional regional LHMP prepared by ABAG. As a result, the HMPC set out to develop a plan that would meet the objectives summarized below.

- The plan would meet or exceed program requirements specified under the DMA of 2000.
- The plan would not only meet Cal OES and FEMA requirements, but also the needs of the City.
- The plan would coordinate existing and ongoing plans and programs already established at the City so that high priority initiatives and projects to mitigate possible disaster impacts would be funded and implemented.
- The plan would create a linkage between the LHMP and established plans such as the City's 2011 General Plan 2025, 2015 Floodplain Management Plan, Water and Infrastructure Master Plans, Capital Improvement Plans and projects, and the City's 2007 Emergency Operation Plan so that existing planning mechanisms can be integrated to help the City achieve successful mitigation.

Given plan integration is a key strategy in the success of LHMP implementation, the HMPC focused on consistency between plans and programs at the City of Petaluma, including the City Council's 2019-2020; 2020-2021 Goals and Priorities Strategic Plan. The HMPC also focused on ensuring each department representative consulted with their individual departments in between meetings to ensure existing capabilities were adequately documented in the LHMP and that mitigation actions were thoroughly reviewed and developed by a range of department leads throughout the City of Petaluma. Appendix A provides additional information and documentation of the planning process.

3.3 The 10-Step Planning Process

Wood established the planning process for the City of Petaluma's LHMP Update using the DMA planning requirements and FEMA's associated guidance. This guidance is structured around a four-phase process:

- 1) Organize Resources
- 2) Assess Risks
- 3) Develop the Mitigation Plan
- 4) Implement the Plan and Monitor Progress



Into this process, Wood integrated a more detailed 10-step planning process used for FEMA’s Community Rating System (CRS) and Flood Mitigation Assistance (FMA) programs, as Petaluma participates in the CRS. Thus, the modified 10-step requirements of the Hazard Mitigation Assistance grants (HMA, including Hazard Mitigation Grant Program, HMGP; Pre-Disaster Mitigation program, PDM; Flood Mitigation Assistance, FMA), CRS, and the flood control projects authorized by the U.S. Army Corps of Engineers (USACE) are addressed. FEMA’s March 2013 Local Mitigation Planning Handbook recommends a nine step process within the four-phase process. Table 3.1 summarizes the four-phase DMA process, the detailed CRS planning steps and work plan used to develop the plan, the nine handbook planning tasks from FEMA’s 2013 Local Mitigation Planning Handbook, and where the results are captured in the Plan. The sections that follow describe each planning step in more detail, including information on the LHMP schedule and general timeframe of activities that took place to develop the plan.

Table 3-1: Mitigation Planning Processes Used to Develop the City of Petaluma’s LHMP

FEMA 4 Phase Guidance Phases	Community Rating System (CRS) Planning Steps	2013 FEMA Local Mitigation Planning Handbook Steps (44 CFR Part 201)	Location in LHMP
Phase 1: Organize Resources	Step 1. Organize Resources	1: Determine the Planning Area and Resources	Chapters 1, 2, and 3
		2: Build the Planning Team 44 CFR 201.6(c)(1)	Chapter 3, Section 3.3.1
	Step 2. Involve the public	3: Create an Outreach Strategy 44 CFR 201.6(b)(1)	Chapter 3, Section 3.3.1
	Step 3. Coordinate with Other Agencies	4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)	Chapter 2, Section 2.2; Chapter 3, Section 3.3.1
Phase 2: Identify Hazards and Assess Risks	Step 4. Assess the hazard	5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)	Chapter 4, Sections 4.1 through 4.3
	Step 5. Assess the problem		Chapter 4, Sections 4.1 through 4.3
Phase 3: Develop a Mitigation Strategy	Step 6. Set goals	6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i); 44 CFR 201.6(c)(3)(ii); and 44 CFR 201.6(c)(3)(iii)	Chapter 5, Section 5.2
	Step 7. Review possible activities		Chapter 5, Section 5.3
	Step 8. Draft an action plan		Chapter 5, Section 5.4
Phase 4: Implement and Monitor the Plan	Step 9. Adopt the plan	8: Review and Adopt the Plan	Chapter 6, Appendix C
	Step 10. Implement, evaluate, and revise	7: Keep the Plan Current	Chapter 7
		9: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)	Chapter 7

3.3.1 Phase 1: Organize Resources

Planning Step 1: Organize the Planning Effort

With the City’s commitment to develop the plan, Wood worked with the City’s Public Works and Utilities Department to establish the framework and organization for the planning process. Organizational efforts were initiated with the City to inform and educate the plan participants of the purpose and need for the City, single-jurisdictional LHMP update. Wood held an initial call on May 28, 2019 to discuss the organizational aspects of this planning process with City’s Public Works and Utilities Department project manager, who took the lead on this project. On June 12, 2019 the City circulated the HMPC invitee list. The schedule of subsequent planning activities is summarized in Table 3-2.





Table 3-2: Local Hazard Mitigation Plan Schedule of Planning Activities

Project Task	Meeting Date(s)
Project Kick-Off Meeting	May 28, 2019
Circulate Draft HMPC Invitee List	June 12, 2019
Submit HMPC Meeting #1 Agenda	July 2, 2019
HMPC Meeting #1	July 8, 2019
Submit Draft Community Engagement Strategy	July 30, 2019
City and HMPC Review of Community Engagement Strategy	August 9, 2019
Submit Final Community Engagement Strategy	August 12, 2019
HMPC Meeting #2	October 7, 2019
Prepare Hazard Identification and Risk Assessment	October 7, 2019
1 st Public Workshop	October 8, 2019
Develop Goals and Objectives	October 8, 2019
HMPC Meeting #3	October 8, 2019
Compile Mitigation Action Worksheets	December 1, 2019
Submit Sea Level Rise Vulnerability Assessment (part of Risk Assessment)	December 4, 2019
Submit 1 st Administrative Draft LHMP	January 17, 2020
City and HMPC provides consolidated comments on 1 st Administrative Draft LHMP	January 31, 2020
Submit 2 nd Administrative Draft LHMP	February 14, 2020
Complete FEMA Region IX Review Tool: Elements A through D	February 18, 2020
Circulate Public Review Draft LHMP	March 31, 2020
Public Review Ends	May 14, 2020
Submit Final Draft LHMP to Cal OES for review (45-day review period)	May 29, 2020
Submit Final Draft LHMP to FEMA Region IX for review	July 17, 2020
City Council Hearing*	TBD (July 21, 2020)

*City Council Meetings are held on the first and third Tuesdays of each month.

Invitations to the kick-off meeting were extended to key City departments, and federal and state agencies, Sonoma County, neighboring municipalities, and key stakeholders. Using FEMA planning guidance, representatives from each City of Petaluma department established the base membership for the HMPC stakeholder committee. The HMPC also included multiple representatives from federal, state, and local agencies, and stakeholders from local school districts, community hospitals, and other organizations. Key representatives from neighboring communities included staff from the Sonoma County Department of Emergency Management, City of Sebastopol, and Sonoma County Water Agency (Sonoma Water). The list of agencies and individuals invited to participate is included in Appendix A.

The HMPC was established as a result of this effort, as well as through interest generated through outreach conducted for this project, which is outlined in more detail in the Community Engagement Strategy. The HMPC collectively developed the plan with leadership from the City and facilitation by Wood. The HMPC meetings also had participation from other agency stakeholders with an interest in hazard mitigation, which are described in Planning Step 3. Representatives from the following City departments and other agencies participated on the HMPC:

City of Petaluma

- City Manager’s Office
 - Building Division
 - Planning Division
 - Economic Division





- Housing Division
- Information Technology Division
- City Clerk Office
- City Attorney's Office
- Finance Department
- Fire Department
- Human Resources Department
- Parks and Recreation Services Department
- Police Department
- Public Works and Utilities Department
 - Capital Improvements
 - Environmental Services
 - Transit
 - Public Works Operations
 - Airport/Marina
 - Development Engineering
 - Parks/Facilities Maintenance

Sonoma County

- Department of Emergency Management

Other Agency and Organization Stakeholders

- City of Sebastopol
 - Building Department
 - Planning Department

A list of participating HMPC representatives is included in Appendix B. This list includes all HMPC members that attended one or more HMPC meetings detailed in Table 3-2. The City also utilized the support of other City staff in order to collect and provide requested data and to conduct timely reviews of draft documents. Note, that the core HMPC group was also supplemented by input from other government and stakeholder representatives that contributed to the planning process as identified in Planning Step 3: Coordinate with Other Department and Agencies.

The planning process officially began with a kick-off meeting on July 8, 2019. The meeting covered the scope of work and an introduction to the DMA requirements. Participants were provided with a Data Collection Guide, which included worksheets to facilitate the collection of information necessary to support development of the plan. Using FEMA guidance, Wood designed these worksheets to capture information on past hazard events, identify hazards of concern to the jurisdiction, quantify values at risk to identified hazards, inventory existing capabilities, and record possible mitigation actions. A copy of Wood's Data Collection Guide for this project is included in Appendix A. The City completed and returned the worksheets in the data collection guide to Wood staff for incorporation into the plan.



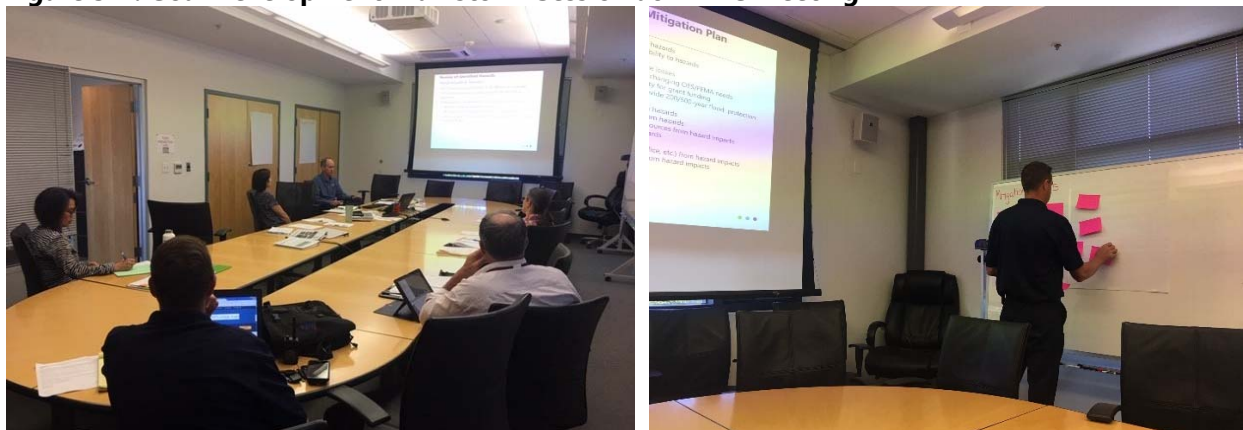
During the planning process, the HMPC communicated through face-to-face meetings, email, and monthly telephone conversations, and added information to the City’s LHMP Webpage. Draft documents were distributed via email to the City’s project manager and then distributed to the HMPC stakeholders. The HMPC met three times during the planning period (July 8, 2019 through October 8, 2019).

The dates and purposes of these meetings are described in Table 3-3. The HMPC also met internally in between meetings to help the City’s Public Works and Utilities Department project manager track deliverables, worksheet materials, and public outreach documentation. Agendas for each of the meetings and lists of attendees are included in Appendix A. Figure 3-1 is from HMPC Meeting #2.

Table 3-3: Schedule of Planning Meetings

Meeting Type	Meeting Topic	Meeting Date(s)
HMPC Meeting #1	Kick-off meeting: introduction to DMA, the planning process, and hazard identification	July 8, 2019
HMPC Meeting #2	Risk assessment overview and work session on goal development	October 7, 2019
HMPC Meeting #3	Development of mitigation actions; selection and prioritization of mitigation recommendations	October 8, 2019

Figure 3-1: Goal Development Brainstorm Session at HMPC Meeting #2



At HMPC Meeting #1, the planning process scope and schedule were discussed, along with the list of hazards addressed in the plan, followed by a presentation that summarized hazard vulnerability. The group was asked what hazards presented the greatest concern. HMPC Meeting #2 focused on the findings from the Risk Assessment and the specific vulnerabilities to the City’s critical assets and infrastructure that need to be addressed in the mitigation strategy. The HMPC also developed broad goals and objectives during HMPC Meeting #2. This led to further discussion and the prioritization of mitigation actions developed at the HMPC Meeting #3. Figure 3-2 is from HMPC Meeting #3.



Figure 3-2: Mitigation Strategy Brainstorm Session at HMPC Meeting #3



Planning Step 2: Involve the Public

Early discussions with the City of Petaluma established the initial plan for public involvement. At the kick-off meeting, the HMPC discussed options for public involvement and agreed to an approach using established public information mechanisms and resources within the community. This approach was outlined in the project’s Community Engagement Strategy (Appendix C). The approach was also supported and implemented by the City’s Public Works and Utilities Department project manager.

Public outreach was initiated during the plan development process with an informational press release to notify the public of the purpose of DMA and the hazard mitigation planning process for the City of Petaluma. The City Public Works and Utilities Department project manager coordinated an interview with the local newspaper, the Petaluma-Argus Courier prior to the first public workshop. Public involvement activities included the development of the project webpage, organization of public workshops, and circulation of press releases and an online survey. The City compiled public comments on the planning process during the first public workshop and formal comments on the draft plan during public review and the second public workshop. Figure 3-3 is from the first public workshop.

Figure 3-3: 1st Public Workshop



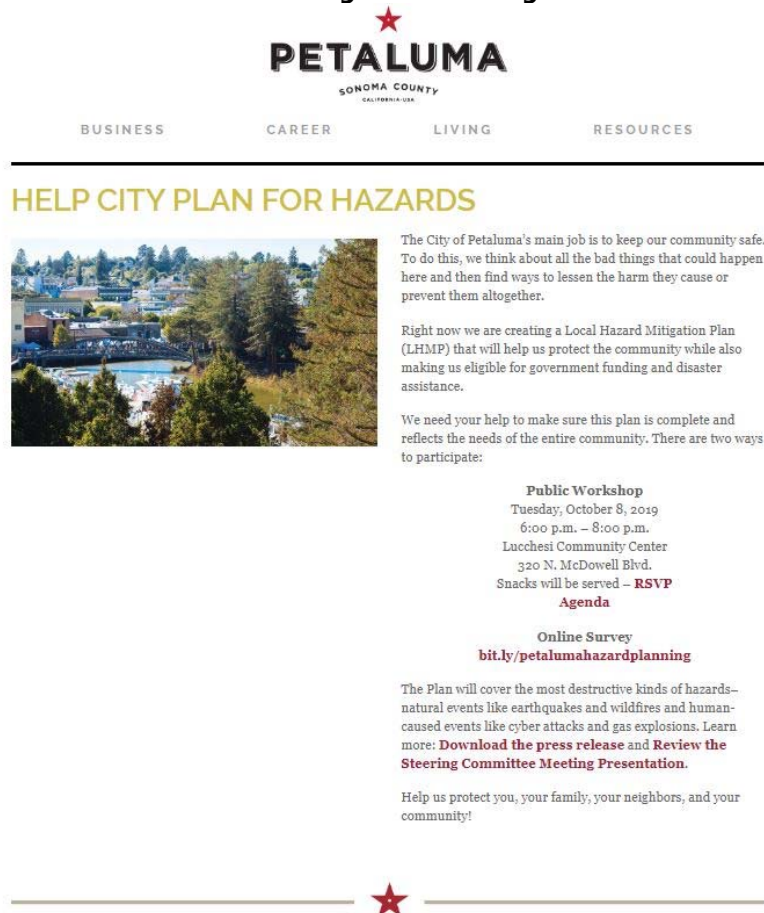
Project Webpage

At the beginning of the planning process, the City Public Works and Utilities Department and City Manager’s Economic Division created a LHMP Webpage linked to the City’s Main Website to keep the public informed on hazard mitigation, the development of the LHMP and the planning process, and as a



place to solicit public input. The LHMP Webpage include a background section on hazard mitigation planning and the DMA. It also highlighted recent natural hazard events that have occurred in the City of Petaluma and adjacent unincorporated Sonoma County. The LHMP Webpage publicized on all media releases, mailings, newsletters, surveys, and public meeting advertisements. It also has a sidebar with the meeting agenda's, minutes, sign-in sheets, and presentations from the various HMPC meetings and public workshops. The City also intends to keep the LHMP Webpage active after the plan is completed to keep the public informed about the status of the mitigation actions. Figure 3-4 shows the City of Petaluma LHMP Webpage. The Public Review Draft LHMP will be available on the LHMP Webpage in March 2020 and April 2020 here: <https://petalumastar.com/hazards/>

Figure 3-4: City of Petaluma Local Hazard Mitigation Planning Website



Public Workshops

Public meetings were held during the draft-plan development process and prior to finalizing the plan as further described in Table 3-4. The first public workshop was held on October 8, 2019 and the second public workshop will be held via a livestream webinar workshop in late April 2020 (check the LHMP Webpage for details). Where appropriate, stakeholder and public comments were incorporated into the final plan, including the sections that address mitigation goals and strategies. Comments submitted during the first public workshop addressed the proposed mitigation actions, specifically the need to include actions related to human-caused hazards associated with hazardous material releases (e.g. natural gas pipelines), wildfire prevention, and emergency preparedness. Detailed comments are summarized below.



All press releases and website postings are on file with the City of Petaluma Public Works and Utilities Department (see Figure 3-5 for an example of a press release published in a local newspaper). The public outreach activities described here were coordinated and fully supported by the City of Petaluma. The two Public Workshops scheduled and organized by the City are detailed in Table 3-4.

Table 3-4: Public Workshops

Meeting Topic	Meeting Dates	Meeting Locations
1 st Public Workshop	October 8, 2019	Lucchesi Community Center
2 nd Public Workshop	Livestream Webinar Workshop (exact date and time are pending)	Lucchesi Community Center

The first Public Workshop was held to solicit public and stakeholder input during draft development of the plan. Public outreach included an email distribution with a notice of the public meeting to the HMPC with direction to share with other associations, boards and committees and postings around the workplace. The meeting notice was also posted on the City of Petaluma LHMP Webpage. The City of Petaluma Public Works and Utilities Department project manager also interviewed with the local newspaper to spread the word about the LHMP and the first public workshop. Ten people attended the public workshop. Sign-in sheets and other workshop materials are included in Appendix A.

There were several clarification comments during a presentation on the need to update the existing LHMP regarding coordination with Sonoma County and how the plan relates to emergency preparedness. One participant asked for information about the existing plan prepared by ABAG, why it expired, and inquired on the timing for the new or updated plan. Another participant indicated there were several man-made hazards in the City, such as gas pipelines that need to be addressed in the updated LHMP. A third attendee asked about fire prevention activities that may benefit the City but are located outside the city limits. Given the timing of the public workshop, all participants were also provided the opportunity to review the mitigation actions developed at the HMPC Meeting #3 that occurred during the afternoon. They were provided colored dot stickers and asked to place a green sticker on mitigation actions they think should be prioritized and a red sticker on mitigation actions they think should not be carried forward for further consideration. They were also provided different color sticky notes and asked to share a mitigation action related to the various action categories (e.g. flooding, earthquakes) displayed across the wall.

Where appropriate, stakeholder and public comments and recommendations were incorporated into the final plan, including the risk assessment and sections that address mitigation goals and strategies. Comments submitted during the second public workshop and during public review will be summarized in this chapter. A summary of the meeting will also be shared with the HMPC and is included in Appendix A.

Prior to finalization of the plan a draft will be made available on the City’s LHMP Webpage for a 45-day public comment period. The Public Review Draft LHMP update will be circulated in late March/early April 2020. An electronic form will be posted with the plan on the City’s LHMP Webpage to capture comments.

Online Survey

During the planning process and drafting stage, a web-based public survey was developed as a tool to gather public input. The survey was for the public to provide feedback to the HMPC on topics related to hazard concerns and reducing hazard impacts. The survey provided an opportunity for public input during the planning process and prior to finalization of the plan. The survey gathered public feedback on concerns about wildfires, floods, earthquakes and other hazards and solicited input on strategies to reduce their impacts. The survey was released as an online tool on October 22, 2019 and will close on January 24, 2020 (3 month comment period). The HMPC provided links to the public survey by





distributing it using social media, email, posting the link on the City's LHMP Webpage, and making it available on tablets at informational booths. As of December 17, 2019, 24 responses were received on the survey. This information was shared with the HMPC to inform the process.

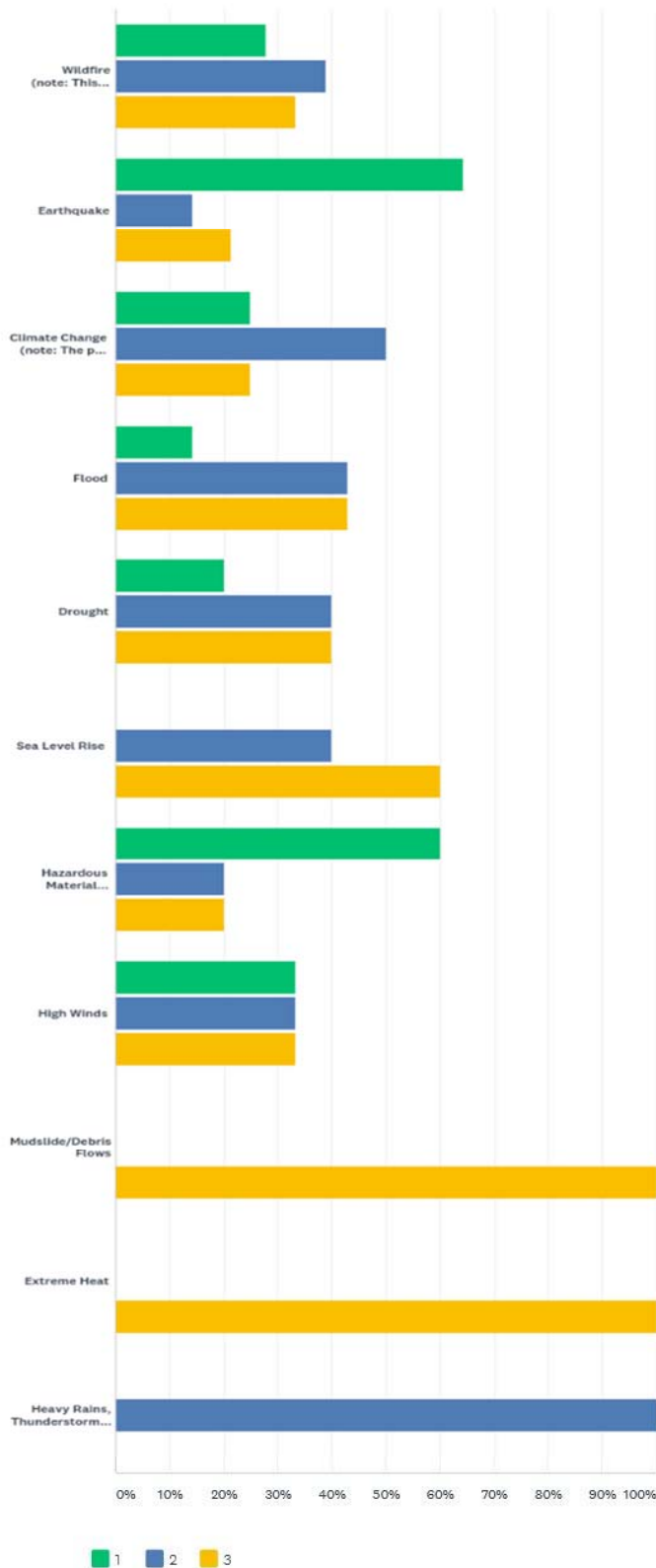
The survey included a total of 18 questions. There was a short section of questions on demographics, specifically on whether participants were residents of the City or the unincorporated portion of Sonoma County. These questions also inquired about homeownership, insurance, and commute patterns. The next section included questions on ranking hazard significance. The results generally track with the significance levels noted in Chapter 4 of this plan, with earthquake, flooding, wildfires, and climate change being considered the most significant. Drought, sea level rise, and high wind events also ranked highly in significance based on the public input. The last section of the survey focused on questions related to mitigation actions that the City should consider in the plan. The results indicated that public education/awareness, planning/zoning, critical facilities protection, stormwater drainage improvements, indoor/outdoor warning systems, and wildland fuels treatment projects were popular topics to the public. These results were shared with the HMPC and considered during the planning process.

Figure 3-5 shows an example of one of the public survey responses from the survey. The full results of the survey are included in Appendix C Planning Process Documentation.



Figure 3-5: Example of Public Survey Response

Q7 The hazards addressed in the Hazard Mitigation Plan are listed below. Please choose the top 3 hazards of most concern to you. Number 1 represents highest concern.



Social Media

The City of Petaluma used the following social media platforms to circulate information on the LHMP:

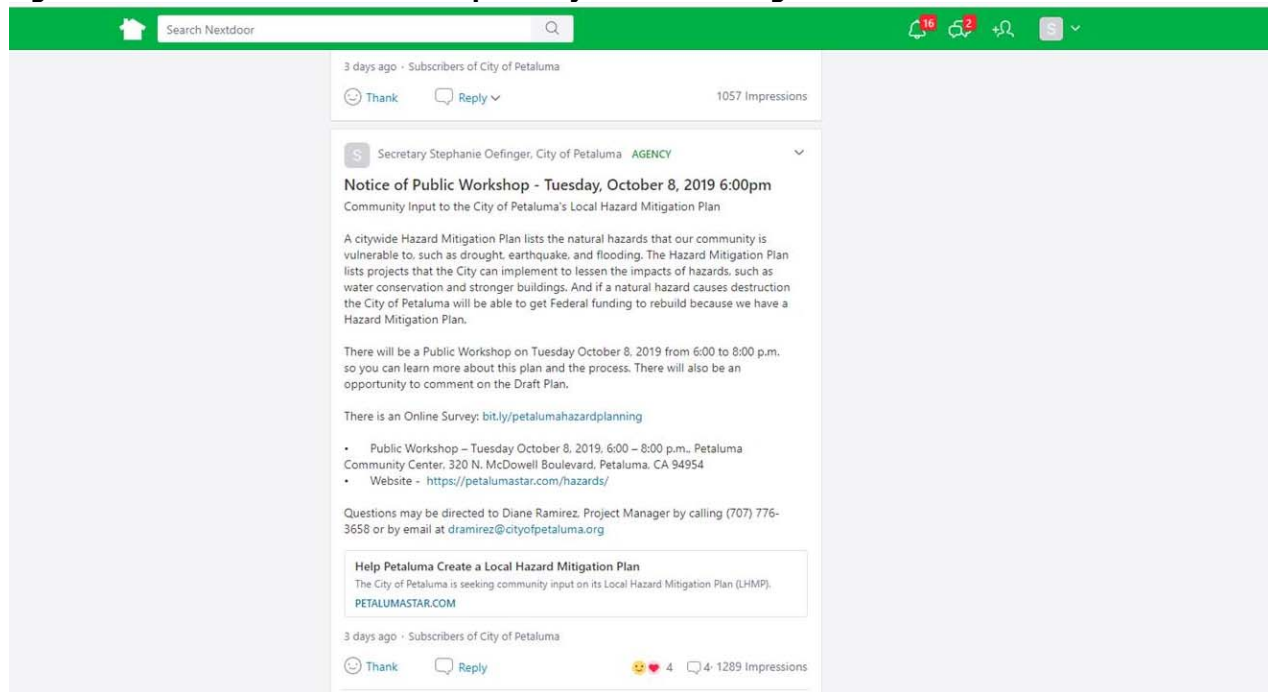
- City Facebook (6,000+ followers);
- City Twitter (2,500+ followers); and
- City Nextdoor (1,500+ followers).

The three social media platforms announced the kick-off of the LHMP planning process, advertise the City's LHMP Webpage and other events, included a link to the online survey, notified the public about meetings and workshops, and announced the availability of the plan for public input and comment. Figure 3-6 is an example of a news feed from the City's Facebook page. Figure 3-6 and Figure 3-7 are examples of the press announcement advertising the first Public Workshop on two social media platforms.

Figure 3-6: Example of Social Media Announcement on City's Facebook Page



Figure 3-7: Notice of Public Workshop on City's Nextdoor Page



Newspapers

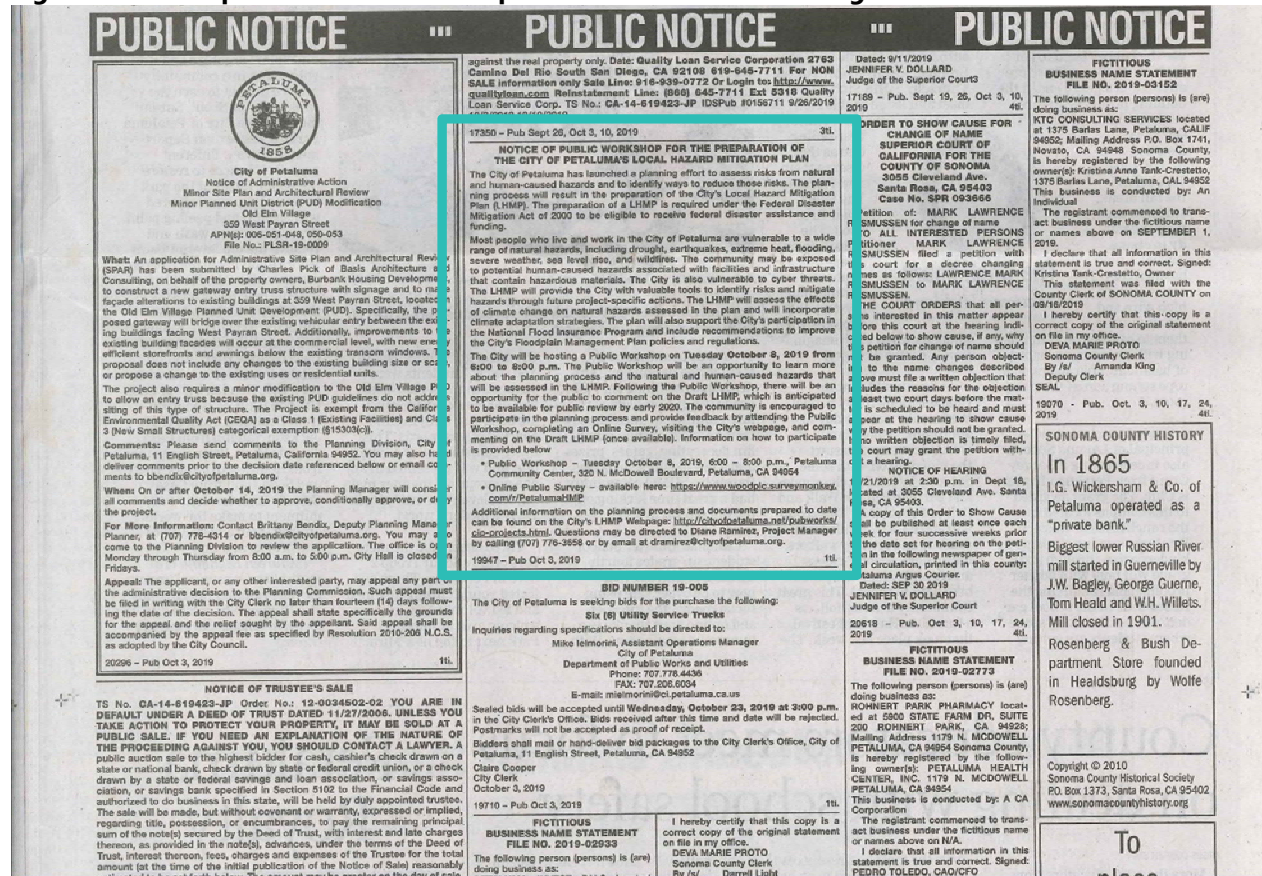
The following regional and local print newspapers were used to circulate and advertise information on the LHMP, specifically the announcement of the public workshop:

- Petaluma Star News
- Petaluma-Argus Courier
- Sonoma County Gazette
- Sonoma Index-Tribune
- Sonoma West Times & News; and
- Press Democrat.

Figure 3-8 is an example of a press release published in the Petaluma-Argus Courier on the public workshop.



Figure 3-8: Example of Public Workshop Notice in the Petaluma-Argus Courier



Press Releases

The City was encouraged to distribute and circulate press releases over the course of the LHMP development. The City's project manager and Wood staff also encouraged HMPC participants and stakeholders to distribute press releases during the project. Press releases were distributed as informational flyers, advertisements, posters, and public notices handed out during community events. These communication platforms were used to spread the news about the LHMP and invite the public to participate in the process.

Advertisements and press releases announced the kick-off of the LHMP planning process, advertised the City's LHMP Webpage and other events, included links to the public survey, notified the public about meetings and workshops, and announced the availability of the plan for public input and comment. Press releases were distributed to multiple print news agencies.

Figure 3-9 and Figure 3-10 are examples of a press releases and newspaper articles used to announce the public workshop in October 2019 and to notify the public about the LHMP update.

Figure 3-9: Example of Press Release for the Public Workshop



Figure 3-10: Example of Newspaper Article published prior to Public Workshop

PETALUMA ARGUS-COURIER • THURSDAY, OCTOBER 3, 2019

Petaluma prepares for emergency

On fire anniversary, city agencies drill for disaster with federal funding at stake

By YOUSEF BAIG
ARGUS-COURIER STAFF

Petaluma officials have been addressing disaster readiness in earnest in recent weeks, starting the process for a new federal hazard plan that will help fortify the city in the future, while also undergoing annual operations training to prepare for a major crisis.

As the two-year anniversary of the North Bay fires approaches, officials are creating a local hazard mitigation plan that would assess what aspects of the city are susceptible to a broad range of natural disasters, like an earthquake or wildfire, or human-caused events like a cyberattack, and then identify ways to reduce those risks.

Once it's adopted, Petaluma would ostensibly become more competitive for grant funds to address those vulnerabilities. The city would also be eligible for the highest tier of federal assistance if an emergency occurred, said Diane Ramirez, project manager for the Public Works and Utilities Department.

She pointed to vital undertakings like the Denman Reach flood control projects that have used more than \$40 million in outside funding to strengthen one of Petaluma's most susceptible natural hazards.

"It's to get the city prepared in case something happens, and what can we do in advance that would mitigate anything that happens in the city," Ramirez said. "More preparation makes us more resilient and able to rebound more quickly."

Petaluma's previous hazard mitigation plan was adopted seven years ago as part of a regional consortium with the Association of Bay Area

Governments.

The rules for the plans have changed, though, and now federal regulators are calling for one in every jurisdiction, Ramirez said.

The scope of hazards officials believe the city is vulnerable to are broad, including drought, earthquakes, extreme heat, flooding, sea level rise and wildfires, according to a press release. Infrastructure contamination and cyber threats were also listed. So was climate change and its impact on natural hazards.

City officials are hosting a workshop at the Petaluma Community Center next week to get feedback on what hazards residents are seeing, and provide more information on the process for adopting the plan.

"We have a lot of base knowledge, but we want to hear from our community what they hear is important," Ramirez said. "There's some prioritization in terms of where we might put funding and projects first based on how the community responds to our preparation."

After the workshop, officials will create a draft that the public can comment on. It then has to get approved by FEMA and eventually the city council before it's adopted.

Ramirez anticipates it'll be in place by spring 2020, and would be subject to future amendments should the science or technology change, she said.

While the hazard plan would serve as a guiding document to reinforce the Petaluma's weaknesses in the future, city employees have to be ready for the worst right now.

Department heads and some of the senior-most public officials across the entire agency met for a mandatory, two-hour

training session last week at the Petaluma Police Department headquarters, the site of the city's emergency operations center in a disaster.

Petaluma's EOC was triggered in October 2017 when the city became a refuge for fire victims and a staging ground for the response efforts throughout Sonoma County.

With several new officials like City Manager Peggy Flynn and Director of Human Resources Charlie Castillo onboard, the city shuffled roles and drilled into the minutia of what was learned in the fire's aftermath.

Departments are sorted into sections like management, logistics, intelligence and operations with responsibilities doled out to ensure public safety and continuity of government, said Petaluma Assistant Fire Chief Jeff Schach.

City officials went over details like what sort of communication is possible with ham radios, record-keeping for federal reimbursement and the

nuances of volunteer activation. They later broke into groups to meet with their sections and go over their chain of command and what the new roles are when an EOC is activated.

"This is my favorite day of the year," Schach said. "When you raise your right hand" to serve as a government employee, "that's what comes with the territory."

Nancy Sands, Economic Development Specialist, described the collaboration across the city's divisions as an effective measure to help ensure every element of service is addressed.

"They are all connected in that they all affect the city's infrastructure," she said. "What I see as a city employee is that we're all working together cross-departmentally, and that's really helpful in making sure that nobody misses anything."

(Contact News Editor Yousef Baig at yousef.baig@arguscourier.com or 776-8461, and on Twitter @YousefBaig.)



CRISSY PASCUAL / ARGUS-COURIER STAFF

City officials, police and fire departments came together for disaster preparedness training.

MORE INFORMATION

What: Public workshop for the preparation of Petaluma's Local Hazard Mitigation Plan

When: Tuesday, Oct. 8 from 6-8 p.m.

Where: Petaluma Community Center, 320 N. McDowell Blvd.

More information: visit petalumastar.com/hazards. Residents who cannot attend the workshop are encouraged to participate in the online survey at bit.ly/petalumahazardplanning



Public Review and Comments on the Draft LHMP

The City will circulate the Public Review Draft LHMP for 45 days; it will be posted on the City's LHMP Webpage and circulated from March 31, 2020 through May 14, 2020. The City solicited public input on the Draft LHMP by collecting and reviewing comments received during the public review period. Comments submitted during public review will be summarized in this chapter in the Final LHMP. Once comments are reviewed the Draft LHMP will then be revised to incorporate specific input.

Planning Step 3: Coordinate with Other Departments and Agencies

Early in the planning process, the HMPC determined that data collection, mitigation strategy development, and plan approval would be greatly enhanced by inviting state and federal agencies and organizations to participate in the process. Based on their involvement in hazard mitigation planning, their landowner status in the County, and/or their interest as a neighboring jurisdiction, representatives from the following agencies were invited to participate on the HMPC:

- U.S. Geological Survey Pacific and Coastal Marine Center
- Sonoma County Department of Emergency Management
- City of Sebastopol
- CAL FIRE
- Petaluma Health Care District
- Sonoma County Water Agency
- Petaluma Community Access
- Petaluma People Services
- Petaluma Visitor's Center
- Petaluma Chamber of Commerce

Wood in coordination with the City and the HMPC also used technical data, reports, and studies from the following agencies and groups:

- American Red Cross
- California Department of Finance
- California Department of Fish and Game
- California Department of Forestry and Fire Protection (Cal Fire)
- California Department of Parks and Recreation Office of Historic Preservation
- California Department of Public Health
- California Department of Water Resources
- California Emergency Management Agency
- California Geological Survey
- Sonoma County Department of Health Services Environmental Health and Safety Division
- U.S. Army Corps of Engineers
- U.S. Center for Disease Protection
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- U.S. Fish and Wildlife Service
- U.S. Forestry Service
- U.S. Geological Survey
- U.S. Census Bureau
- Federal Emergency Management Agency
- National Weather Service
- National Oceanic and Atmospheric Administration, National Climatic Data Center
- National Resource Conservation Service

Several opportunities were provided for the above groups to participate in the planning process. At the beginning of the planning process, invitations were extended to the first group to actively participate on





the HMPC and as a stakeholder representative to support the DMA planning process and to maximize credits under the NFIP CRS program. Specific participants from these groups are detailed in Appendix A.

The Sonoma County Department of Emergency Management staff worked closely with the City of Petaluma and HMPC. The City also provided various opportunities for Sonoma County and other neighboring communities, such as the City of Sebastopol to participate in the City of Petaluma LHMP development. Others assisted in the process by providing data directly as requested in the Data Collection Guide or through data contained on their websites or as maintained by their offices. These groups were also invited to participate through the public outreach process, which included public workshops as previously described. Further as part of the HMPC and public outreach processes, all groups were invited to review and comment on the plan during public review and prior to submittal to Cal OES and FEMA.

Other Community Planning Efforts and Hazard Mitigation Activities

Coordination with other community planning efforts is paramount to the success of this plan. Hazard mitigation planning involves identifying existing policies, tools, and actions that will reduce a community's risk and vulnerability to hazards. The City of Petaluma uses a variety of comprehensive planning mechanisms, such as general plans and ordinances, to guide growth and development. Integrating existing planning efforts and mitigation policies and action strategies into this plan establishes a credible and comprehensive plan that ties into and supports other community programs. The development of this plan incorporated information from the following existing plans, studies, reports, and initiatives listed in Table 3-5. Other related planning efforts were inventoried in the capability assessment in Chapter 2.

Table 3-5: Incorporated Planning Mechanisms

City of Petaluma Plans	How Plan is Incorporated in LHMP
FY 2019-2020; FY 2020-2021 City of Petaluma Goals and Priorities Strategic Plan	<ul style="list-style-type: none"> • The City of Petaluma Goals and Priorities for 2019 through 2021 outline objectives and workplan items that ensure the City operates efficiently and sustainably and provides valued services promptly and professionally engages the community. • The goals and priorities include objectives and workplan items related to environmental stewardship, river and open space protection, and the encouragement of sustainable development. • There are numerous goals and priorities outlined as objectives and workplan items related to enhanced public safety, emergency preparedness, and resiliency in a section titled, "A Safe Community that Thrives." • Other workplan items that support hazard mitigation include maintaining current staffing levels and response times, evaluating city facilities for replacement, creating an EOC, assisting the community with special needs, improving public safety and fire prevention activities, promoting emergency preparedness and resiliency strategies, and promoting improved community engagement and multilingual outreach.
City of Petaluma General Plan 2025 (2008)	<ul style="list-style-type: none"> • Incorporated relevant hazard information from the Safety Element into the LHMP. • Reviewed the Community Facilities, Services and Education Element goals and objectives in HMPC Meeting #2 and integrated them into the LHMP • Reviewed the Water Resources Element goals and objectives in HMPC Meeting #2 and integrated them into the LHMP. • Reviewed the Health and Safety Element goals and objectives in HMPC Meeting #2 and integrated them into the LHMP. • Reviewed the 5-year planning mechanisms for the General Plan to determine if plan updates occurred, when, how often, and whether the next update can integrate the LHMP into the Safety Element.





	<ul style="list-style-type: none"> • Discussed whether a General Plan Advisory Group (or GPAC) could participate and provide a consistency review with the City’s General Plan Health and Safety Element (and other elements covering water resources and fire prevention). • Assembly Bill 2140 requires the adoption of LHMPs into the General Plan Safety Element after LHMP Approval; this topic was discussed during each HMPC meeting. • The LHMP emphasizes need to ensure General Plan is amended to include the LHMP after it’s approved by City Council; this information is included in the chapter on the adoption process.
<p>NFIP Participation (1980)</p>	<ul style="list-style-type: none"> • The City of Petaluma has participated in the NFIP since 19780 by administering floodplain management regulations; the current effective map date is October 12, 2015. • The LHMP integrates information in the risk assessment on the most recent Flood Insurance Study (FIS) completed for Sonoma County on March 7, 2017. • Reviewed DFIRMS and base flood elevation (BFE) data for critical facilities and properties identified within the flood hazard zones. • Reviewed NFIP and CRS related audits of the City’s floodplain management efforts over two decades; the City has a Class 6 rating in the CRS. • The City plans to maintain an electronic record of the base flood elevations (BFE) certificates for properties within the Special Flood Hazard Area (SFHA); this information was summarized in the risk assessment and taken into consideration during the development of the mitigation strategy.
<p>Community Rating System (1991)</p>	<ul style="list-style-type: none"> • This City has participated in the CRS program since 1991 as a way to reduce potential losses due to flooding. • As of July 10, 2019, there were approximately 415 flood insurance policies in effect in the City. • The LHMP discusses several potential opportunities to improve the City’s class rating in the Capability Assessment. • The LHMP specifically discusses activities of credit the City could consider to reach a Class 5 rating, including outreach, floodplain management planning, and drainage system maintenance.
<p>Floodplain Management Plan (2015)</p>	<ul style="list-style-type: none"> • The LHMP summarizes the Floodplain Management Plan (FMP) in detail in the Risk Assessment (Chapter 4) and the Capabilities Assessment (Chapter 2). • The HMPC reviewed the goals and strategies from the 2015 FMP and cross-referenced them during the development of the LHMP goals and objectives. • The HMPC and City re-reviewed these goals again during the development of the mitigation actions, as several actions in the LHMP came from the FMP, as they related to flood control projects (i.e. floodwall) and climate adaptation strategies. • The HMPC provided updates on specific strategies from the FMP, as these were referenced as goals and strategies in the City of Petaluma 2010 Annex to the ABAG plan, and updates were required as part of the DMA planning process.
<p>City of Petaluma Residential Growth Management System Ordinance (1972)</p>	<ul style="list-style-type: none"> • City’s RGMS ordinance is summarized in the Community Profile in Chapter 2 and as it relates to growth and development trends in the City’s Planning Area





	<ul style="list-style-type: none"> • The City's RGMS is also summarized in the City's Capability Assessment in Chapter 2 as a tool to ensure new development integrates appropriate site specific measures to reduce natural hazards • The LHMP also discussed the UGB as a tool to manage growth and development. • The discussion on growth management in the LHMP illustrates that most major commercial and residential development projects in the City are within the city limits.
City of Petaluma Urban Water Management Plan (2015)	<ul style="list-style-type: none"> • The UWMP evaluates the required potable and recycled water system facilities required to serve the buildout of the City's General Plan. • Integrates availability and reliability information on the City's existing and future water supplies into the LHMP. • Cross references goals and projects outlined in the UWMP, specifically those related to new groundwater water facilities as similar mitigation actions were prioritized by the HMPC • Incorporates information on a shift in water demand from mostly surface water supplies to groundwater supplies • Integrates water conservation principles and strategies developed in the plan related to the City's capital improvement program and plans for potable and recycled water system facilities.
City of Petaluma Storm Water Management Plan (2003)	<ul style="list-style-type: none"> • Describes actions that address the reduction of nutrients, pathogens, and sediment in the City's stormwater. • The LHMP addressed this plan broadly, as it relates to flood hazards.
City of Petaluma Emergency Operations Plan (2007)	<ul style="list-style-type: none"> • The EOP is a basic plan that addresses the City of Petaluma's responsibilities in emergencies associated with natural disaster, human-caused emergencies, and technological incidents. It also provides a framework for coordination of recovery efforts within the City. • The EOP was discussed at most HMPC meetings given it was last updated in 2007 and needs to address current hazard issues in the City, especially because the Emergency Operation Center (EOC) has been activated several times over the past few years due to wildfires and planned public safety shutoffs (PSPS).
Sustainability Action Plan (2015)	<ul style="list-style-type: none"> • HMPC discussed the Regional Climate Protection Authority (RCPA) during meetings as it relates to climate change priorities and sea level rise. • The Sustainability Action Plan summarizes goals to reduce municipal greenhouse gas (GHG) emissions, reduce solid waste diversion in the City, provide 780 million gallons of recycled water by 2025, convert waste to energy at the Wastewater Treatment Facility, and install LED streetlights among many other goals. • Discussions regarding the City's Sustainability Action Plan at the HMPC meetings were general, the consultant team reviewed the broad goals and various action measures outlined in the plan to ensure any measures related to the LHMP mitigation actions were cross-referenced
Other Plans	
Petaluma Municipal Services Review (2011)	<ul style="list-style-type: none"> • The City of Petaluma's 2011 Municipal Services Review (MSR) identifies the future needs for the extension of infrastructure and the provision of services from the City to new development within the planning horizon. • Wood reviewed this plan to ensure facility and infrastructure needs were integrated into the LHMP; the plan provides information on the City's facilities and infrastructure and staff could compare facility lists to understand what is include in the LHMP and what facility was not included and why





	<ul style="list-style-type: none"> • Based on findings from the City’s MSR, it is structured to meet the needs of the development that is proposed within the SOI and UGB. • The LHMP notes that the City’s ability to serve the anticipated growth within the UGB and the SOI is not anticipated to have any adverse effects on the City, as there are several mechanisms in place to effectively expand facilities and services.
<p>Sonoma County Operational Area Hazard Mitigation Plan (2016)</p>	<ul style="list-style-type: none"> • Hazard profile information from the 2016 Sonoma County Operational Area HMP was incorporated throughout the LHMP, where appropriate; this included information on flooding, landslides, and earthquake hazards. • HMPC reviewed the Sonoma County Operational Area HMP goals during the development of the City of Petaluma LHMP goals and objectives. • There are comparative tables on the hazards profiled in the state and county plan to those addressed in the Health and Safety Element of the City’s General Plan. This information was helpful for the HMPC to compare which hazards to address and which to prioritize. • Sonoma County stakeholder from the Department of Emergency Management participated in the HMPC meetings and provided mitigation goals and action strategies to consider developing in the City’s LHMP. • Sonoma County intends to update their plan in 2020; this provides the City with another opportunity to participate with hazard mitigation planning efforts in the region.
<p>California State Hazard Mitigation Plan (2018)</p>	<ul style="list-style-type: none"> • Reviewed goals and objectives in the State Hazard Mitigation Plan (SHMP) and noted the new and revised hazards related to community resilience • Reviewed the hazards profiled in the SHMP and compared those with the hazards summarized in the City’s 2011 Health and Safety Element and the 2016 Sonoma County Operational Area HMP. • Integrated disaster declaration information and other key findings on major hazards from the SHMP into the City’s LHMP Update. • Under 44 CFR Section 201.6, local hazard mitigation plans must be consistent with the state’s hazard mitigation plan. In updating this plan, HMPC and consultant staff reviewed California’s SHMP to identify key relevant state plan elements.
<p>Petaluma Valley Groundwater Sustainability Agency Draft Groundwater Sustainability Plan (2020)</p>	<ul style="list-style-type: none"> • The 20-year Groundwater Sustainability Plan (GSP) ensures the sustainable use of groundwater within the Petaluma Valley Groundwater Basin. • The plan establishes standard groundwater management tools. • The plan also incorporates best available scientific and technical information by building on the technical foundation already established for the Petaluma Valley Basin. • The plan integrates the interests of many users and uses of groundwater resources within the Petaluma Valley Basin through public and community engagement.

Other documents were reviewed and considered, as appropriate, during the collection of data to support Planning Steps 4 and 5, which include the hazard identification, vulnerability assessment, and capability assessment. Appendix B References identifies additional documents and community planning efforts utilized in the development of this plan. Specific references relied on in the development of this plan are also sourced throughout the document as appropriate.



3.3.2 Phase 2: Assess Risks

Planning Steps 4 and 5: Identify the Hazards and Assess the Risks

Wood led the HMPC in a comprehensive research effort to identify and document all the hazards that have, or could, impact the City's Planning Area. Data collection worksheets were developed and used in this effort to aid in determining hazards and vulnerabilities and where risk varies across the Planning Area. Geographic information systems (GIS) were used to display, analyze, and quantify hazards and vulnerabilities. The HMPC also conducted a capability assessment to review and document the Planning Area's current capabilities to mitigate risk and vulnerability from hazards. By collecting information about existing government programs, policies, regulations, ordinances, and emergency plans, the HMPC could assess those activities and measures already in place that contribute to mitigating some of the risks and vulnerabilities identified. Using this information, Wood developed the risk assessment portion of the plan, which contained the hazard identification, the vulnerability assessment, and the capability assessment. Wood completed the risk assessment in October 2019 and the information was presented at the second HMPC meeting on October 7, 2019. A more detailed description of the risk assessment process and the results are included in Chapter 4 Risk Assessment. The risk assessment also included a vulnerability assessment on sea level rise and related flooding completed in November 2019.

3.3.3 Phase 3: Develop the Mitigation Plan

Planning Steps 6 and 7: Set Goals and Review Possible Activities

Wood facilitated brainstorming and discussion sessions with the HMPC on October 7, 2019, including a description of the purpose and process of developing planning goals, as well as discussion of a comprehensive range of mitigation alternatives, and a method of selecting and defending recommended mitigation actions using a series of selection criteria. Additional details of the process to develop goals and actions is included in Chapter 5 Mitigation Strategy. Documentation on the process the HMPC used to develop the goals and strategy is in Appendix C.

Planning Step 8: Draft an Action Plan

Based on input from the HMPC during the October 8, 2019 and from subsequent review of the draft risk assessment and the goals and activities identified in Planning Steps 6 and 7, Wood produced a complete first draft of the plan. This complete draft was internally circulated for HMPC review and comment via email in January 2020. HMPC and agency comments were integrated into the second draft in February.

Public Review Draft LHMP

The Public Review Draft LHMP was advertised and distributed to collect public input and comments. The City will circulate the Public Review Draft LHMP for 45 days from March 31, 2020 through May 14, 2020. During this time, Wood integrated comments and issues from the public and stakeholders, as appropriate, along with additional agency and other stakeholder internal review comments. During the public review period, the City received comments from the general public.

Wood produced a final draft LHMP in March 2020 for Cal OES and FEMA Region IX staff to review and approve, contingent upon final adoption by Petaluma City Council.

3.3.4 Phase 4: Implement the Plan and Monitor Progress

Planning Step 9: Adopt the Plan

In order to secure buy-in and officially implement the plan, the plan was reviewed by the Planning Commission and adopted by the Petaluma City Council on the dates included in the corresponding resolution in Appendix D: Adoption Resolution.





Planning Step 10: Implement, Evaluate, and Revise the Plan

The true worth of any mitigation plan is in the effectiveness of its implementation. In the previous steps of the planning process the HMPC's efforts have been directed at researching data, gathering information for the plan, and developing appropriate mitigation actions. Each recommended action includes key descriptors, such as a lead entity and possible funding sources, to help initiate implementation. An overall implementation strategy for the City's LHMP is described in Chapter 7 Plan Implementation and Maintenance.

Finally, there are numerous organizations within the City of Petaluma's Planning Area whose goals and interests interface with hazard mitigation. Coordination with these other planning efforts, as addressed in Planning Step 3, is key to the ongoing success of this plan and mitigation in the City of Petaluma and is addressed further in Chapter 7. A plan update and maintenance schedule and a strategy for continued public involvement are also included in Chapter 7.

