OFFICE OF EMERGENCY SERVICES

CITY OF
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Palo Alto, CA 94301
650.617.3197

Local Hazard Mitigation and Adaptation Plan
Internal Planning Meeting #3: 26 April 2016

Meeting Date, Location, Time

Palo Alto Emergency Operations Center
A Level, 275 Forest Ave
Palo Alto, CA 94301

April 26, 2016
9am – 10:30pm

Meeting Objectives

- Identify mitigation and adaptation goals

Pre-Meeting Materials

- LHMAP Project Plan
- Meeting Agenda
- Meeting Slideshow
- Draft Plan

At-Meeting Materials

- Agenda
- Meeting Slideshow
- Hazard Assessment Problem Statements
- Mitigation Actions Handout

Meeting Participants

- See Attached Roster

Agenda

9:00 am	**Welcome – Introductions** • Nathan demonstrated the Public Site located at cityofpaloalto.org/lhmap. • Nathan also mentioned that during the previous mention a recommendation was made to use "Climate Adaptation" instead of simply "Adaptation" in the title. Phil Bobel mentioned that we can still be focused on adaptation from all hazards and not limit the descriptor to Climate Adaptation. As a result, we will keep the LHMAP title.	Nathan Rainey
9:05 am	**Review Mitigation Goals Framework** • Nathan walked the group through the FEMA framework to develop goals based on the 2013 Local Mitigation Planning Handbook. He compared the FEMA framework of Goals, Objectives, Actions to the Comprehensive Plan framework of Goals, Policies, Programs. • The main output of the Goals and strategies phase is to develop a list of mitigation actions that can be pursued to mitigate our known risks. Phil Bobel requested that Nathan make available the list of projects from the previous plan. • The City is already involved in a number of actions that will likely be included in this process; departmental representatives should review their list of near term planned actions that should be considered in the development of mitigation actions.	All

	• Phil Bobel also requested that the LHMAP planning process, as closely as possible, be aligned to the Floodplain Management Planning (FMP) process to be in compliance with the Community Rating System (CRS) Section 510 requirements. Generally, the LHMAP process we are implementing follows the 10 step process (see attachment).	
9:35 am	**Discuss Mitigation Goals and Strategies – List Draft Goals Developed** • Nathan offered examples of community goals from the current State and Association of Bay Area Governments LHMP, and then briefed three community goals for the planning team to consider. • David Ramberg asked how many goals we should include in our planning. Nathan Rainey mentioned that 2-5 goals is a manageable list. • The planning team discussed the three draft goals and recommended three goals as possible LHMAP Goals: 1. Protect Life and Property from Natural Hazards, such as Earthquake, Landslide, Flooding, and Fire. (Direct link to the Comprehensive Plan). 2. Promote hazard mitigation as a guiding principal in City of Palo Alto planning frameworks, i.e. Comprehensive Plan, Sustainability/Climate Action Plan, Energy Assurance/Resiliency Plan. 3. Inform and Engage the public on our mitigation and preparation to Palo Alto hazards. These goals will be discussed in Stakeholder Meeting #2.	**All**
10:05 am	**Review Results of Hazard Exposure – Discuss Problem Statements** • Simon Williams displayed the Hazard Mapping products we have prepared to date, to demonstrate the hazard impacts to Palo Alto. The group discussed and developed high level problem statements for each of the Hazards currently with a Hazard map. Nathan will revise these problem statements for inclusion in Chapter 5.	**All**
10:25 am	**Review Status of LHMCAP, Chapters 3-5** • We did not have time to review these chapters. Nathan has the current draft planning document loaded on the sharepoint site and has asked representatives to start looking at the plan. Nathan will be directing planning team members review certain portions of the plan that pertain to them.	**Nathan Rainey**
10:25 am	Review Stakeholder Meeting Plan for 27 April 2016.	**Nathan Rainey**

	• We did not have time to review this in any detail, but Nathan quickly mentioned that the focus of the meeting would follow what the internal planning team accomplished at our second meeting – hazard analysis. • Generally, the stakeholder workshops will follow one meeting behind the Internal Planning Team meetings.	
10:30 am	**Next steps** • Prepare for Public / Stakeholder Meeting • Update LHMAP Planning Draft Chapters 3-5 between now and 25 May 2016.	**Nathan Rainey**

Action Items

Item	Task	Suspense	Assigned To
1	Publish Minutes / Publish documents on the OES Microsoft Sharepoint Drive and Public Website	28 April 2016	Nathan Rainey
2	Nathan will update draft Goals and republish for IPT members	28 April 2016	Nathan Rainey
3	Nathan will revise these problem statements for inclusion in Chapter 5	6 May 2016	Nathan Rainey
4	Nathan make available the list of projects from the previous LHMAP plans	6 May 2016	
5	Review and Update Chapter 5: Hazard Identification, Analysis, and Risk Assessment	14 May 2016	Nathan Rainey / Simon Williams
6	Update Chapter 3: Capability Assessment with Internal Planning Team feedback / participation	24 May 2016	All Team Members – Nathan will provide specific instructions to team members
7	Update Chapter 4: Community Profile	24 May 2016	Nathan Rainey, with specific input from certain planning team members
8	Departmental representatives should review their list of near term planned actions that should be considered in the development of mitigation actions.		

Enclosures
1. Attendance Roster
2. Meeting Slideshow
3. CRS Section 510 Checklist

LHMAP Sharepoint
Site: https://paloalto365.sharepoint.com/sites/CityCenter/publicsafety/oes/Local%20Hazard%20Mitigation%20Plan/Forms/AllItems.aspx

LHMAP Public Site: www.cityofpaloalto.org/lhmap

Initial	Name	Attendance	Response
	Rainey, Nathaniel	Meeting Organizer	None
	Peterson, Lon	Required Attendee	Accepted
	Fehrenbach, Thomas	Required Attendee	None
	Friend, Gil	Required Attendee	None
	Macartney, Cody	Required Attendee	Accepted
	Ramberg, David	Required Attendee	Accepted
	Hoyt, George	Required Attendee	Declined
	Yarbrough, Shane	Required Attendee	Tentative
	Roderick, Kim	Required Attendee	Tentative
	Frost, Jasmine	Required Attendee	Accepted
	Blanch, Sandra	Required Attendee	Declined
	Cullen, Charles	Required Attendee	Accepted
	Bobel, Phil	Required Attendee	Accepted
	Swanson, Andrew	Required Attendee	None
	Batchelor, Dean	Required Attendee	Accepted
	Williams, Simon	Required Attendee	Accepted
	Howard, Adam	Required Attendee	Accepted
	Anderson, Daren	Required Attendee	Accepted
	Garcia, RuthAnn	Required Attendee	None
	Lee, Elena	Required Attendee	None
	Dueker, Kenneth	Required Attendee	Accepted

Office of Emergency Services

LHMAP Internal Planning Meeting #3
26 April 2016

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http://www.cityofpaloalto.org/publicsafety

Agenda

- Introduction
- Review Mitigation Goals Framework
- Discuss Mitigation Goals and Strategies – List Draft Goals Developed
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- Review Status of LHMCAP, Chapters 3-5
- Review Stakeholder Meeting Plan for 27 April 2016

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LHMAP Roadmap

1 June 2017: Plan Adopted by City Council
1 April 2017: Plan Approved by FEMA

November: Submit Plan for State/Fed Review

Sept: Draft Plan Public Comment

30 Aug 2016: Internal Mtng 4

5 Aug 2016: Stakeholder Mtng 3

26 Jul 2016: Internal Mtng 4

26 May 2016: Stakeholder Mtng 2

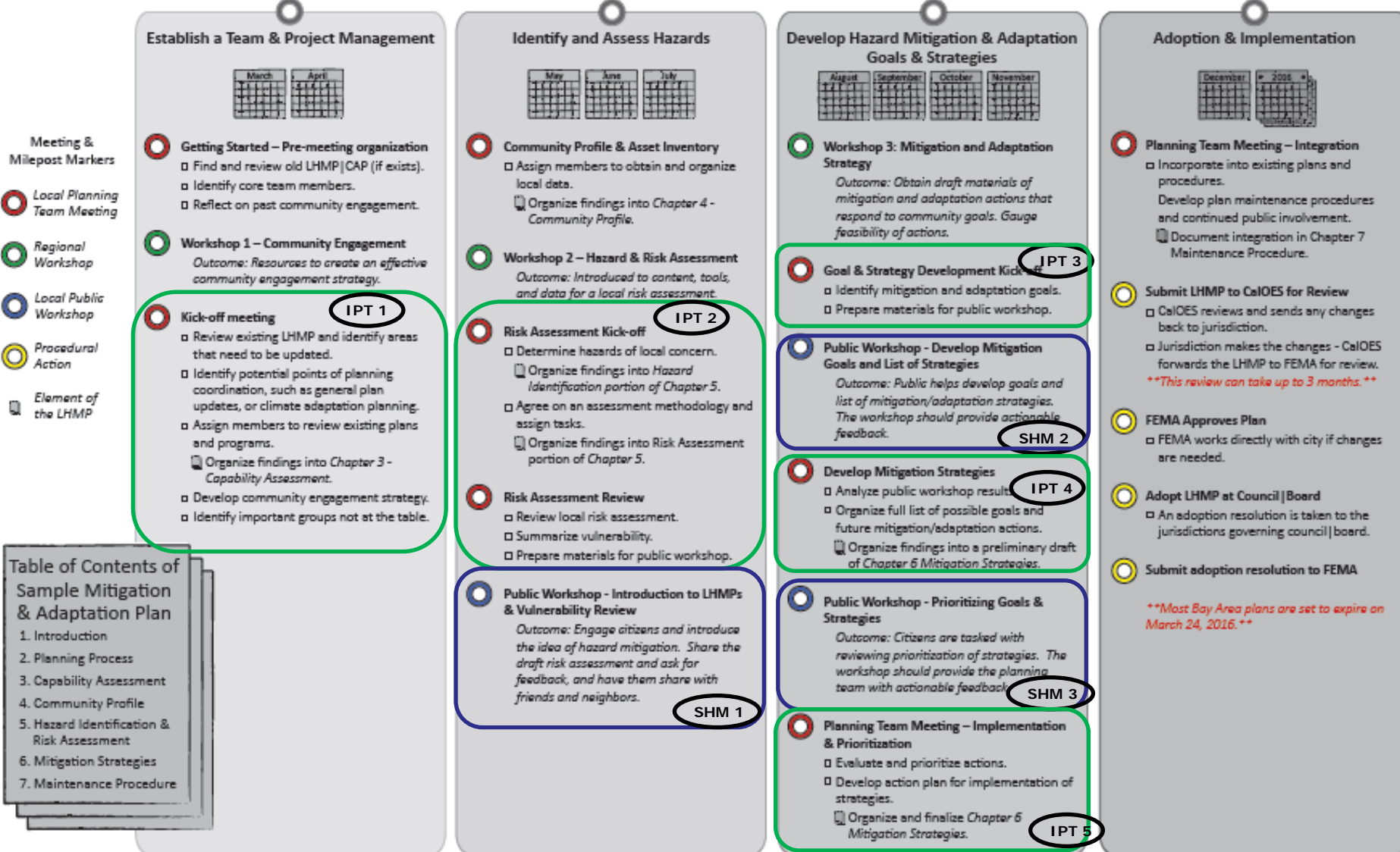*27 Apr 2016: Stakeholder Mtng 1*

26 Apr 2016: Internal Mtng 3

31 Mar 2016: Internal Mtng 2

25 Feb 2016: Internal KO Mtng

Public Workshops:
- May (Risk Exposure): May Fete
- July (Goals and Strategies): Chili Cookoff / Online Survey
- September: Special Session

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Hazard Mitigation & Climate Adaptation Planning: Meeting Roadmap

Establish a Team & Project Management

March | April

Meeting & Milepost Markers

- 🔴 Local Planning Team Meeting
- 🟢 Regional Workshop
- 🔵 Local Public Workshop
- 🟡 Procedural Action
- 💻 Element of the LHMP

- 🔴 **Getting Started – Pre-meeting organization**
  - ☐ Find and review old LHMP|CAP (if exists).
  - ☐ Identify core team members.
  - ☐ Reflect on past community engagement.

- 🟢 **Workshop 1 – Community Engagement**
  - *Outcome: Resources to create an effective community engagement strategy.*

- 🔴 **Kick-off meeting**   **IPT 1**
  - ☐ Review existing LHMP and identify areas that need to be updated.
  - ☐ Identify potential points of planning coordination, such as general plan updates, or climate adaptation planning.
  - ☐ Assign members to review existing plans and programs.
    - 💻 Organize findings into *Chapter 3 - Capability Assessment.*
  - ☐ Develop community engagement strategy.
  - ☐ Identify important groups not at the table.

Table of Contents of Sample Mitigation & Adaptation Plan
1. Introduction
2. Planning Process
3. Capability Assessment
4. Community Profile
5. Hazard Identification & Risk Assessment
6. Mitigation Strategies
7. Maintenance Procedure

Identify and Assess Hazards

May | June | July

- 🔴 **Community Profile & Asset Inventory**
  - ☐ Assign members to obtain and organize local data.
    - 💻 Organize findings into *Chapter 4 - Community Profile.*

- 🟢 **Workshop 2 – Hazard & Risk Assessment**
  - *Outcome: Introduced to content, tools, and data for a local risk assessment.*

- 🔴 **Risk Assessment Kick-off**   **IPT 2**
  - ☐ Determine hazards of local concern.
    - 💻 Organize findings into *Hazard Identification portion of Chapter 5.*
  - ☐ Agree on an assessment methodology and assign tasks.
    - 💻 Organize findings into Risk Assessment portion of *Chapter 5.*

- 🔴 **Risk Assessment Review**
  - ☐ Review local risk assessment.
  - ☐ Summarize vulnerability.
  - ☐ Prepare materials for public workshop.

- 🔵 **Public Workshop - Introduction to LHMPs & Vulnerability Review**
  - *Outcome: Engage citizens and introduce the idea of hazard mitigation. Share the draft risk assessment and ask for feedback, and have them share with friends and neighbors.*   **SHM 1**

Develop Hazard Mitigation & Adaptation Goals & Strategies

August | September | October | November

- 🟢 **Workshop 3: Mitigation and Adaptation Strategy**
  - *Outcome: Obtain draft materials of mitigation and adaptation actions that respond to community goals. Gauge feasibility of actions.*

- 🔴 **Goal & Strategy Development Kick-off**   **IPT 3**
  - ☐ Identify mitigation and adaptation goals.
  - ☐ Prepare materials for public workshop.

- 🔵 **Public Workshop - Develop Mitigation Goals and List of Strategies**
  - *Outcome: Public helps develop goals and list of mitigation/adaptation strategies. The workshop should provide actionable feedback.*   **SHM 2**

- 🔴 **Develop Mitigation Strategies**   **IPT 4**
  - ☐ Analyze public workshop results.
  - ☐ Organize full list of possible goals and future mitigation/adaptation actions.
    - 💻 Organize findings into a preliminary draft of *Chapter 6 Mitigation Strategies.*

- 🔵 **Public Workshop - Prioritizing Goals & Strategies**
  - *Outcome: Citizens are tasked with reviewing prioritization of strategies. The workshop should provide the planning team with actionable feedback.*   **SHM 3**

- 🔴 **Planning Team Meeting – Implementation & Prioritization**
  - ☐ Evaluate and prioritize actions.
  - ☐ Develop action plan for implementation of strategies.
    - 💻 Organize and finalize *Chapter 6 Mitigation Strategies.*   **IPT 5**

Adoption & Implementation

December | 2016

- 🔴 **Planning Team Meeting – Integration**
  - ☐ Incorporate into existing plans and procedures.
    Develop plan maintenance procedures and continued public involvement.
    - 💻 Document integration in Chapter 7 Maintenance Procedure.

- 🟡 **Submit LHMP to CalOES for Review**
  - ☐ CalOES reviews and sends any changes back to jurisdiction.
  - ☐ Jurisdiction makes the changes - CalOES forwards the LHMP to FEMA for review.
    This review can take up to 3 months.

- 🟡 **FEMA Approves Plan**
  - ☐ FEMA works directly with city if changes are needed.

- 🟡 **Adopt LHMP at Council|Board**
  - ☐ An adoption resolution is taken to the jurisdictions governing council|board.

- 🟡 **Submit adoption resolution to FEMA**

  Most Bay Area plans are set to expire on March 24, 2016.

IPT: Internal Planning Team Meeting
SHM: Stakeholder Meeting

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Mitigation Goals

Goals
What long-term outcomes do you want to achieve?

Actions
What specific actions will local government, community organizations, and others take to reduce risk to hazards?

Action Plan
How will the actions be prioritized and implemented?

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

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

- Although not required, some choose to develop objectives to help define or organize mitigation actions.

Goal
Minimize new development in hazard-prone areas.

Objective
Reduce the number of vulnerable structures in flood hazards areas.

Actions
Amend zoning ordinance to permit only open space and uses within floodplains.

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Mitigation Actions

- FEMA suggests four categories for Mitigation Actions

  - Local Plans and Regulations

  - Structure and Infrastructure Projects

  - Natural Systems Protection

  - Education and Awareness Programs

- Review problem statements from hazards summary for potential actions.

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Community Goals

- ID Community Goals to help frame and guide the assessment
  - What are the overarching goals we believe this plan should address
  - Make decisions about prioritizing strategies
  - Get stakeholders and the public on board

- Can be in relation to asset classes:
  - People
  - Building stock
  - Critical infrastructure
  - Utilities infrastructure
  - Transportation infrastructure
  - Communications infrastructure
  - Recreation and open spaces
  - Hazardous Material sites / contaminated lands

- Do themes develop?

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2013 State HMP Goals

- Significantly reduce life loss and injuries
- Minimize damage to structures and property, as well as minimizing interruption of essential services and activities
- Protect the environment
- Promote hazard mitigation as an integrated public policy and as a standard business practice

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2011 ABAG HMP Goal

- To maintain and enhance a disaster-resistant region by reducing the potential loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters.

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Draft Overarching Goals

- Protect Life and Property from Natural Hazards, including Earthquake, Landslide, Flooding, and Fire. (From Comp Plan Goal N:10)

- Prepare for Climate Adaptation (From the S/CAP)

- Promote hazard mitigation as an integrated public policy and as a standard business practice (From State HMP)

  - Integrate mitigation planning with other related *comprehensive or strategic* planning efforts; for example, Comprehensive Plan, S/CAP, THIRA, Energy Resilience.

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Hazard Problem Statements

- Sea Level Rise (From Draft S/CAP p. 8)

   "Palo Alto recognizes that some of the City's critical utility infrastructure, including the Regional Water Quality Control Plant and the Utility Control Center, is located in a flood basin or in close proximity to the low-lying shoreline where risk of damage or disruption from sea level rise is significant."

Sea Level Rise (Climate Risks) Policies and Programs

S/CAP P.69

- **Promote and participate in cooperative planning with other public agencies** and regional and adjacent jurisdictions, especially regarding issues related to climate change, such as water supply, sea level rise, fire protection services, emergency medical services, and emergency response planning.

- **Develop new requirements for shoreline development** to ensure that new development is designed and located to provide protection from potential impacts of flooding resulting from sea level rise and significant flood events. Requirements may include: new setbacks to ensure to structures are set back far enough inland that they will not be endangered by erosion; limits on subdivisions and lot line adjustments in areas vulnerable to sea level rise to avoid the creation of new shoreline lots; incentive or transfer of development rights (TDR) programs to relocate existing development away from high risk areas; and/or triggers for relocation or removal of existing structures based on changing site conditions and other factors.

- **Continue to build resilience into City planning and capital projects**, especially near the San Francisco Bay shoreline. With the Municipal Service Center (MSC) located in a potential future inundation zone, emergency response capabilities may be affected and further analysis is needed to determine the best approach to protect the emergency response capabilities and other services that the MSC provides.

- **Pursue "green infrastructure"** as required by the Regional Water Quality Control Board and as warranted by staff analysis; include supporting policies in the Comp Plan Update aimed at increasing storm water infiltration.

- **Evaluate and strengthen SLR and flooding concerns** in planning, zoning, permitting and insurance requirements

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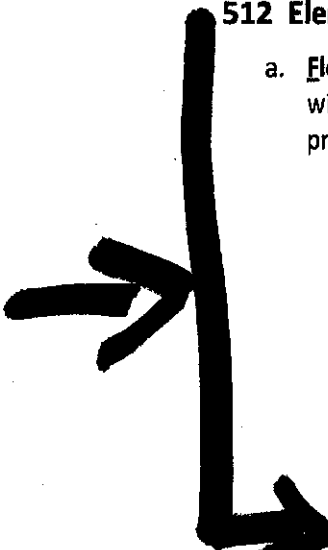
Hazard Problem Statements

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510 FLOODPLAIN MANAGEMENT PLANNING—Summary

Maximum credit: 622 points

512 Elements

a. **Floodplain management planning (FMP)**: 382 points for a community-wide floodplain management plan that follows a 10-step planning process:

> Step 1. Organize
> Step 2. Involve the public
> Step 3. Coordinate
> Step 4. Assess the hazard
> Step 5. Assess the problem
> Step 6. Set goals
> Step 7. Review possible activities
> Step 8. Draft an action plan
> Step 9. Adopt the plan
> Step 10. Implement, evaluate, revise.

b. **Repetitive loss area analysis (RLAA)**: 140 points for a detailed mitigation plan for a repetitive loss area.

c. **Natural floodplain functions plan (NFP)**: 100 points for adopting plans that protect one or more natural functions within the community's floodplain.

Credit Criteria

Each element has a separate section discussing credit criteria.

Impact Adjustment

The impact adjustments for FMP and RLAA are described in separate sections. There is no impact adjustment for NFP.

Documentation Provided by the Community

Each element has a separate section describing needed documentation.