# SWEETWATER SPRINGS WATER DISTRICT

**TO:** Board of Directors **AGENDA NO. V-F**

**FROM:** Ed Fortner, General Manager

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**Meeting Date: October 1, 2020**

**SUBJECT: Local Hazard Mitigation Plan Update**

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**RECOMMENDED ACTION:** Receive report from the General Manager. Update of the Local Hazard Mitigation Plan.

**FISCAL IMPACT:** $30,074

**DISCUSSION:**

At the August 6th Board meeting, the Board approved Harris and Associates to undertake and complete a Local Hazard Mitigation (LHMP) to help the District qualify for FEMA grants. Eric Vaughan, with Harris and Associates, Jack Bushgen, Julie Kenny, and I participated in the first Planning Committee meeting on September 4th. The meeting discussion included a description of the hazard mitigation plan process that consists of the planning process and the stakeholder and public involvement. The meeting also entailed a discussion of all the potential hazard risks and their ranking as to frequency and severity. These risks included a review of County and State hazard plans and ranking of the District's risks listed in order of most severe to least severe; floods, landslides, wildfire, and earthquakes. A detailed timeline of the project, the meeting agenda, meeting minutes, and meeting PowerPoint presentation is attached. Invitations have been sent to all Board members for the October meeting.

# MEETING AGENDA

## Sweetwater Springs Water District –Hazard Mitigation Plan

Lead Agency: Sweetwater Springs Water District

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## Planning Committee Meeting #1
## August 27, 2020
## 1:30 p.m. to 3:00 p.m.

**Purpose of Meeting:** This is the Kick-off meeting regarding the development of the Sweetwater Springs Water District Hazard Mitigation Plan. The purpose of the meeting is to provide information about the Plan, the planning process, and identification of Hazards of Concern.

| | | | |
|---|---|---|---|
| i. | **Welcome & Introductions**<br>• Welcome!<br>• Please introduce yourself! | **Eric Vaughan** | **1:30PM** |
| **ii.** | **What is a Hazard Mitigation Plan**<br>• The planning process<br>• Stakeholder and public involvement<br>• Planning process | **Wendy Boemecke** | **1:45PM** |
| **iii.** | **How will the Plan benefit the Community?** | **Eric Vaughan** | **2:00PM** |
| **iv.** | **How can you participate in the process?**<br>• 3 meetings total<br>• Participation & Feedback | **Wendy Boemecke** | **2:05PM** |
| **v.** | **Hazards of Concern Workshop**<br>• Current State & County plans<br>• Disaster history<br>• Hazards of Concern | **Eric Vaughan**<br>**Carolyn Yvellez**<br>**Wendy Boemecke** | **2:10PM** |
| **vi.** | **Roundtable/Questions** | | **2:45PM** |
| **vii.** | **Adjourn** | | **3:00PM** |

# SWEETWATER SPRINGS WATER DISTRICT HAZARD MITIGATION PLAN

## AUGUST 26, 2020

## KICK OFF MEETING #1

Sweetwater Springs WATER DISTRICT

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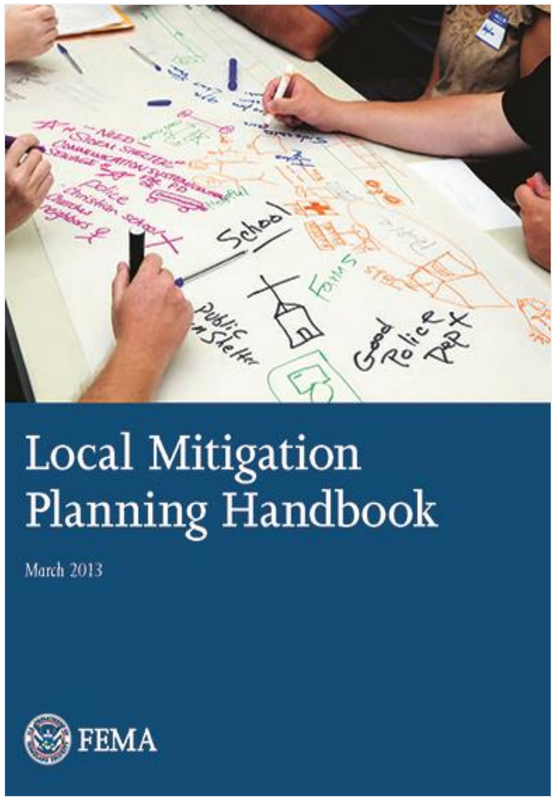
- Welcome and Introductions
- What is a Hazard Mitigation Plan?
- How Will it Benefit the District?
- How Can you Participate in the Process?
- Hazards of Concern Workshop



# WELCOME AND INTRODUCTIONS

- Who are you?
- What agency are you with?
- What is your title?

# WHAT IS A HAZARD MITIGATION PLAN?

## A Hazard Mitigation Plan Includes:

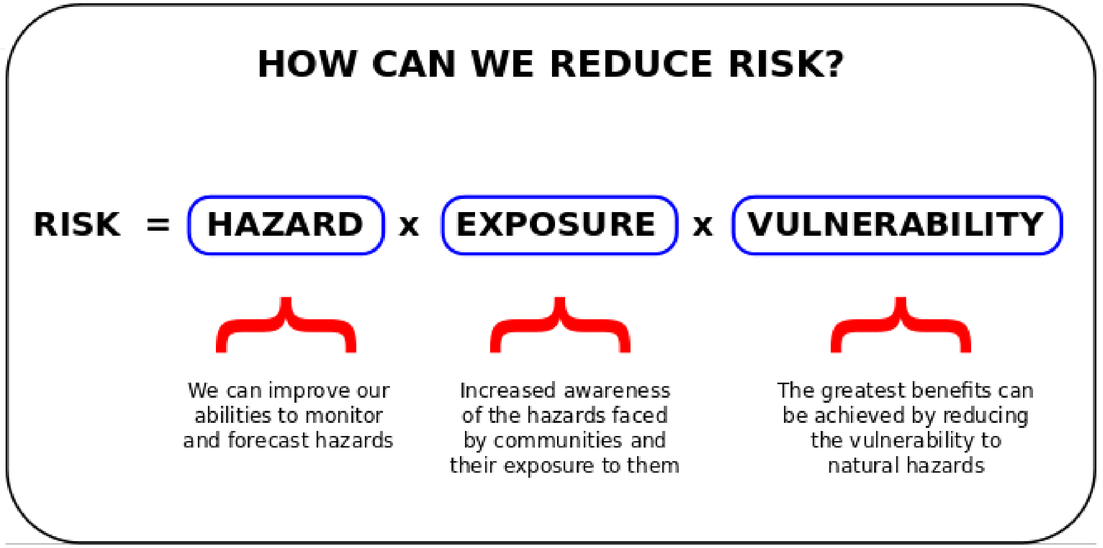
- Description of the planning process
- Neighboring jurisdiction involvement
- Public involvement
- Identification of natural hazards
- Identification of mitigation actions that reduce risk or mitigate impacts

***Hazard Mitigation Planning is the process used to understand risks from natural hazards and develop long-term strategies to reduce the impacts of disasters on people, property, and the environment.***

# WHAT IS A HAZARD MITIGATION PLAN? (CONT.)

## A Hazard Mitigation Plan Includes:

- Assessment of risk
- Identification of goals
- Mitigation actions and priorities




**The plan is reviewed by CalOES and FEMA before adoption and implementation.**

# HOW WILL THE PLAN BENEFIT THE DISTRICT

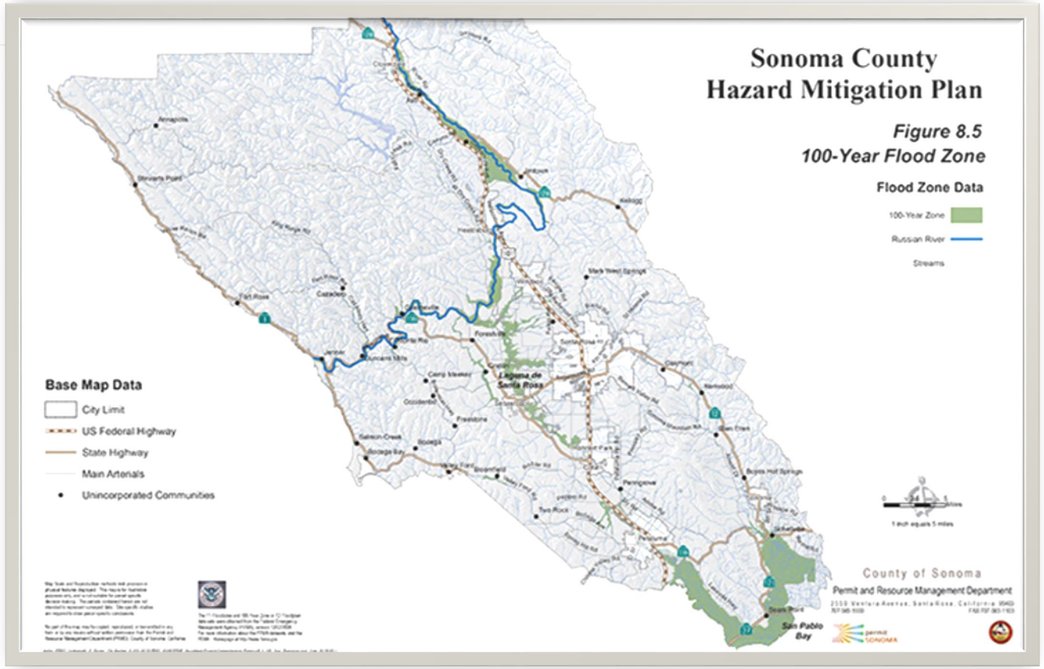
- Disaster mitigation saves $6 for every $1 spent
- Cultivate a culture of safety
- Federal/State grants

# HOW CAN YOU PARTICIPATE IN THE PROCESS?

- Actively participate in planning meetings
  1. Kick-off
  2. September –Present Risk Assessment
  3. October – Prioritize Mitigation Actions
- Submit feedback on time
- Contribute expertise and ask questions

# HAZARDS OF CONCERN WORKSHOP

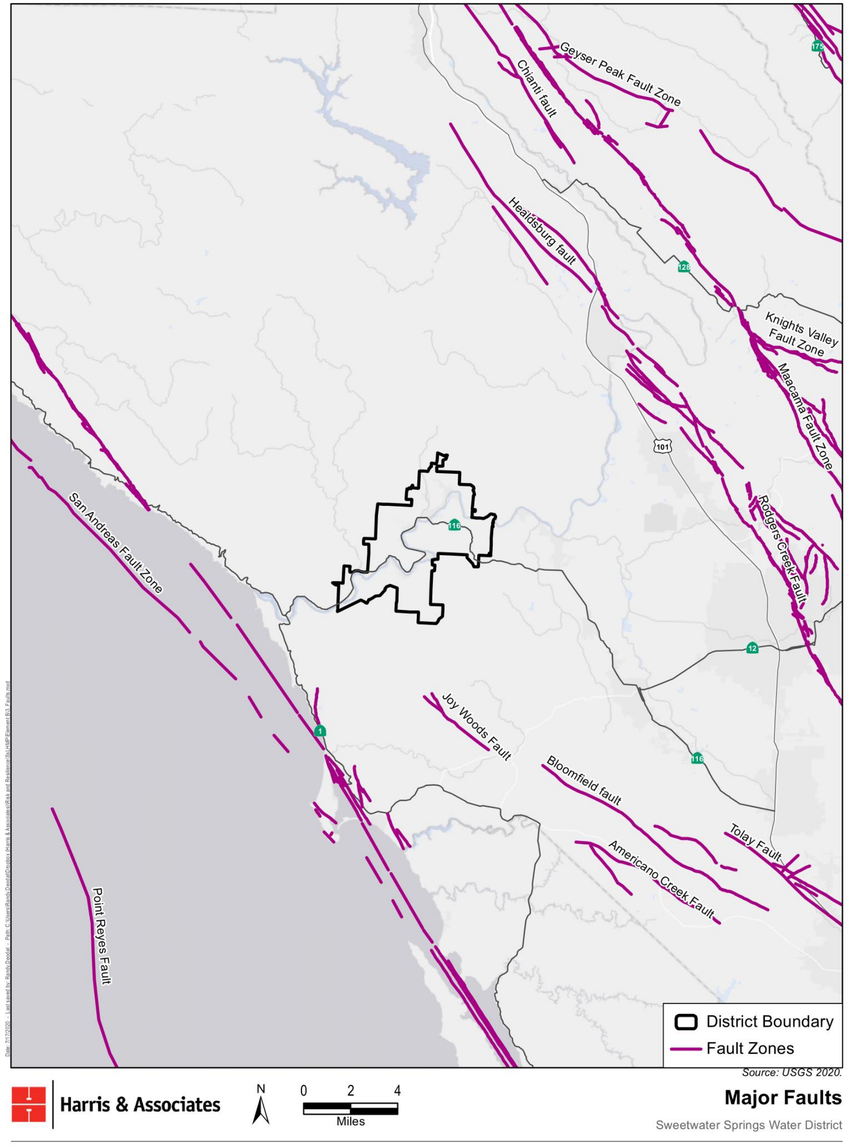
- Current State & County Plans
- Review other technical documents
- Review maps
- Review disaster history
- List of the District's Hazards of Concern
- Approve Hazards of Concern for Plan

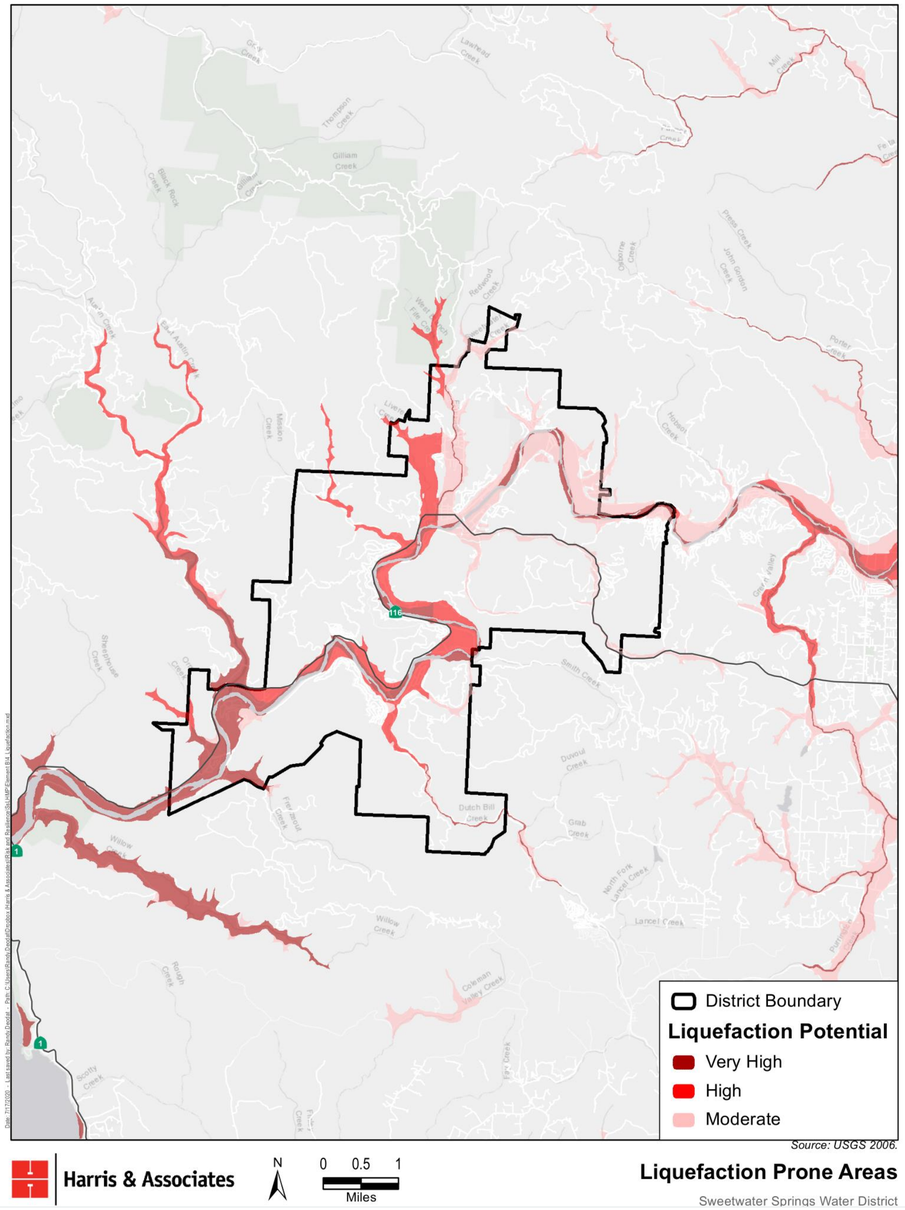


# EARTHQUAKE

- **Ground shaking** is the motion felt on the earth's surface caused by seismic waves generated by the earthquake. It is the primary cause of earthquake damage. The strength of ground shaking depends on the magnitude of the earthquake, the type of fault, and distance from the epicenter (where the earthquake originates).

- Two earthquake scenarios to consider based on proximity and previous occurrence:
    1. San Andreas Fault M8.0 Earthquake Scenario
    2. Rodgers Creek M7.29 Earthquake Scenario

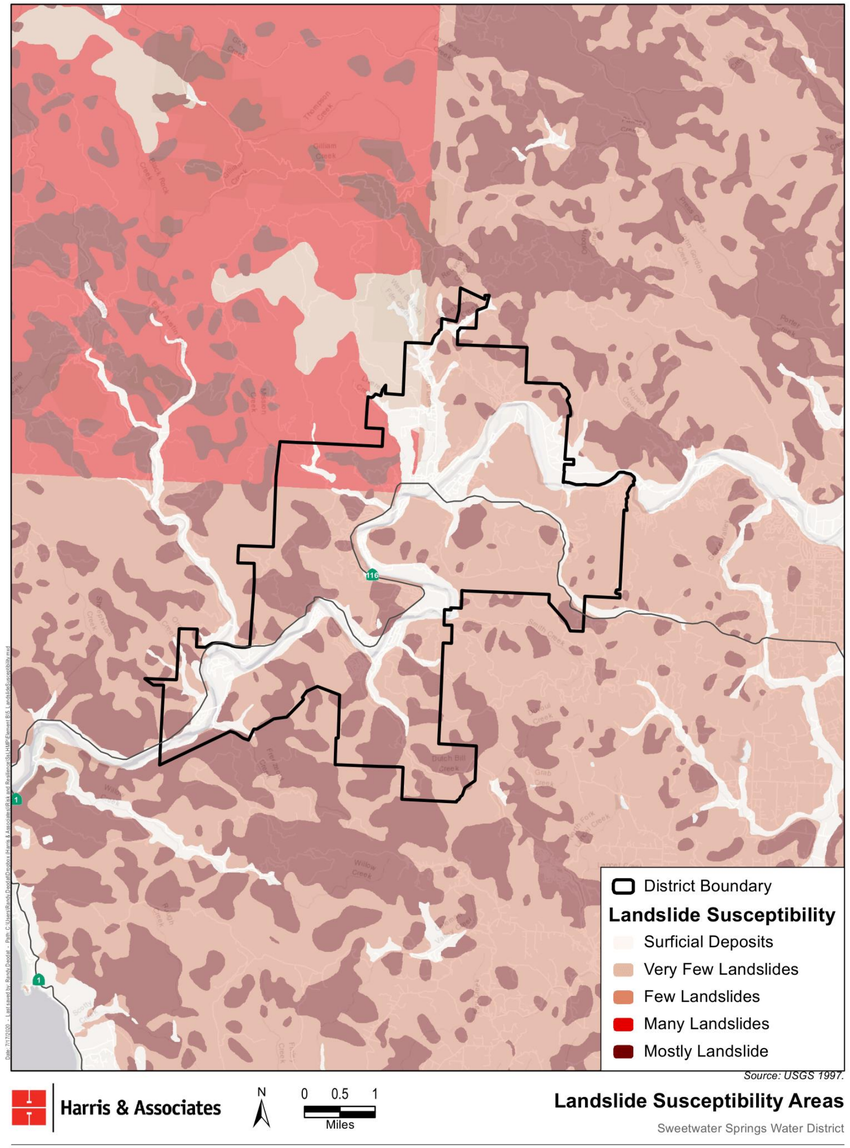





# LIQUEFACTION

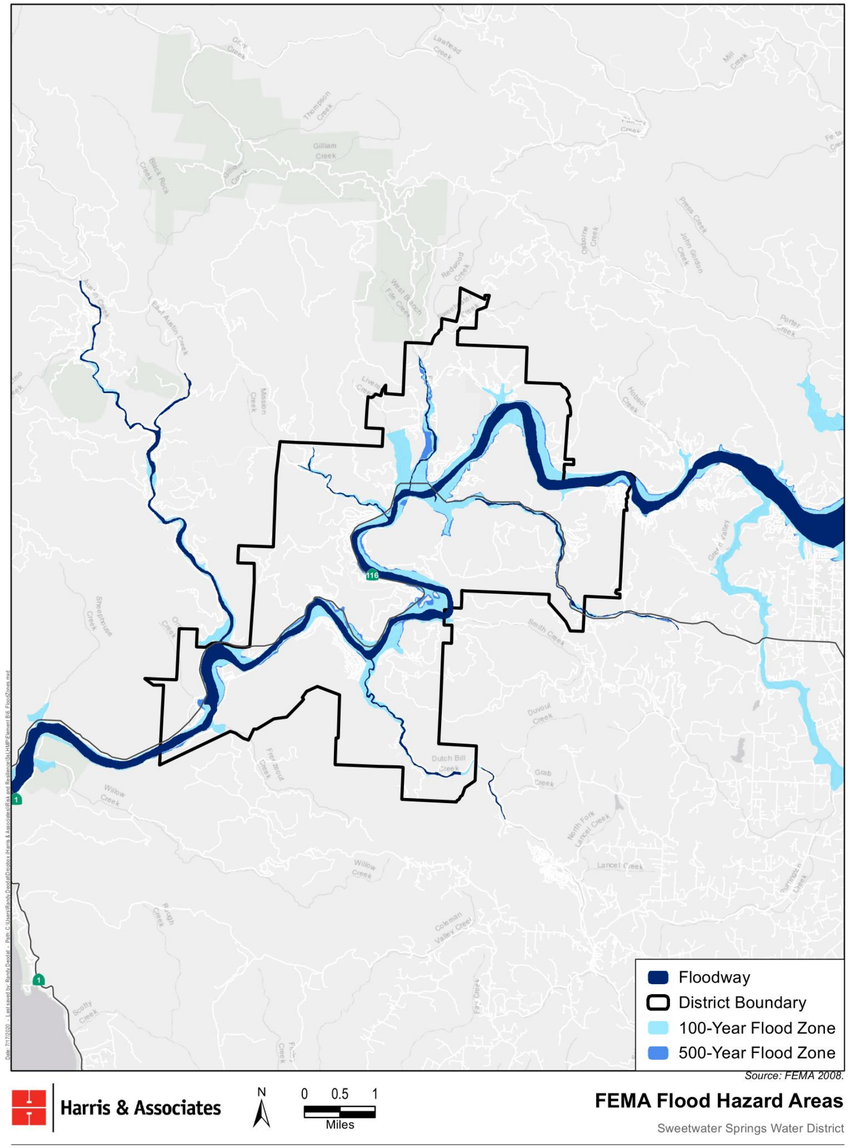
- **Liquefaction** occurs when ground shaking causes wet granular soils to change from a solid state to a liquid state. This results in the loss of soil strength and the soil's ability to support weight. Buildings and their occupants are at risk when the ground can no longer support these structures.

- Liquefaction generally occurs during significant earthquake activity, and structures located on soils such as silt or sand may experience significant damage during an earthquake due to the instability of structural foundations and the moving earth.



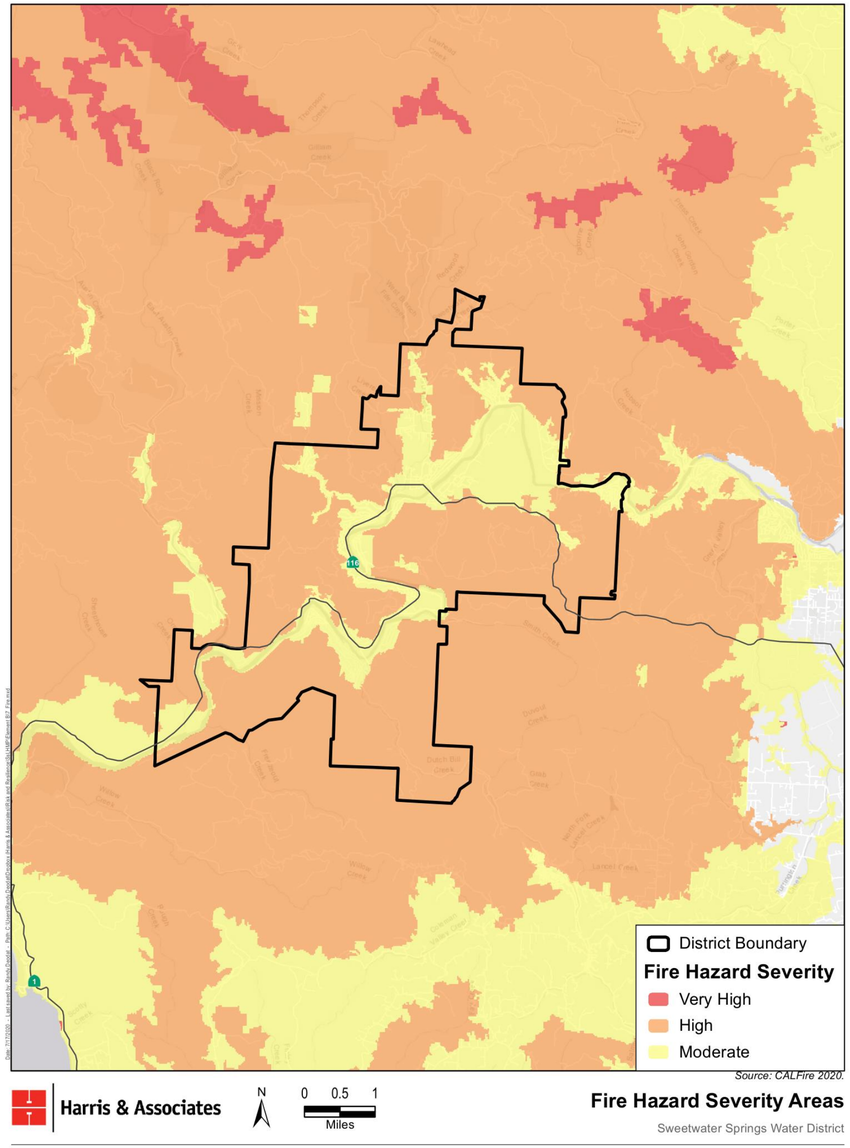

# LANDSLIDE

**Landslides** consist of rock falls, disrupted soil slides, rock slides, soil lateral spreads, soil slumps, soil block slides, and soil avalanches. Areas having the potential for earthquake-induced landslides generally occur in areas of previous landslide movement, or where local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.




# FLOOD

**Riverine flooding** is the overbank flooding of rivers and streams. The natural processes of riverine flooding add sediment and nutrients to fertile floodplain areas. Flooding in large river systems typically results from large-scale weather systems that generate prolonged rainfall over a wide geographic area, causing flooding in hundreds of smaller streams, which then drain into the major rivers.




# WILDFIRE

A wildfire is an uncontrolled fire spreading through vegetative fuels and exposing or possibly consuming structures. They often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees fuel wildfires.

# THANK YOU FOR YOUR TIME!

**WE LOOK FORWARD TO WORKING WITH YOU TO CREATE A MORE RESILIENT WATER DISTRICT**

**Please contact Ed Fortner for more information:**
**efortner@sweetwatersprings.com**

**Sweetwater Springs – 2021 Local Hazard Mitigation Plan**
**Planning Committee Meeting #1 – Kickoff**
**September 4, 2020**

# MEETING MINUTES

**Name of Meeting:** Kickoff and Hazard Identification
**Date of Meeting:** September 4, 2020
**Time:** 1:30 PM to 3:00 PM
**Location:** Main Conference Room, Sweetwater Springs Water District
**Subject:** The purpose of the meeting was to review the planning process, public involvement, the study area, and hazards of concern.

**Planning Committee Attendees:**

| NAME | COMPANY/AGENCY | TITLE | PRESENT (YES/NO) | CITY STAFF/ RESIDENT/ STAKEHOLDER |
|---|---|---|---|---|
| Ed Fortner | Sweetwater Springs Water District | General Manager | Yes | District Staff |
| Jack Bushgen | Sweetwater Springs Water District | Field Manager | No | District Staff |
| Julie Kenny | Sweetwater Springs Water District | Administration Manager | No | District Staff |

**Members of the Planning Committee members that attended the meeting signed the attached Sign-In Sheet (Please see attached)**

**Jeff Duvall, with Sonoma County Emergency Management Department intends to serve as a member of the planning committee but was unable to join this meeting due to ongoing emergency operations.**

**Neighboring jurisdictions were invited to participate but did not respond to the invitation included representatives from Sonoma Water Agency, and Santa Rosa Water Department.**

**Members from the public were invited to participate but did not respond to the invitation included representation from the Lower Russian River Municipal Advisory Committee, the Monte Rio and Guerneville Chambers of Commerce and advertisement was placed on the Water Districts website for one week. Copy of the posting will be part of the Local Hazard Mitigation Plan.**

**Distribution:** Planning Committee members via email, Posting on Website
**Date issued:** September 18, 2020

| ITEM | DISCUSSION | ACTION BY |
|---|---|---|
| 1. | Eric welcomed everyone and the group introduced themselves. There were 3 District staff members that attended the meeting | Eric |
| 2. | Ed discussed the composition of the planning committee and mentioned that Jeff Duvall from Sonoma County Emergency Management intend to participate in the planning process. He mentioned that he participates in the County EOC and watershed safety group. | Ed |
| 3. | Regarding the LNU Lightening Complex Fires, Ed and Jack noted that District property and assets were very possibly impacted in the Mt. Jackson area. They planned to investigate when it was safe to do so. | Ed and Jack |
| 4. | Eric reviewed the planning process, hazard and risk assessment, mitigation actions, and the monitoring, updating and evaluation of the plan. A key benefit of having the LHMP which will allow the city to apply for Federal/State grants, allows that citizens to be aware of the hazards. | Eric |
| 5. | Eric provided a review the hazards that are outlined in the State Hazard Mitigation Plan, in the County of Sonoma Hazard Mitigation Plan, and the Sonoma Water Hazard Mitigation Plan. The group discussed the historical record, probability, and potential impact of each (see Hazards of Concern Table below). Eric presented some initial mapping conducted by Harris staff. Eric asked the group if there were any changes or additions that need to be made. The Committee determined to include identified hazards with either a high probability of occurrence or severity (see Hazards of Concern table below).<br><br>Ed noted areas of the County HMP that were relevant to the District for Harris staff to review.<br><br>Julia recommended that Eric tour the Districts key assets and service area to better understand the hazard context and state of infrastructure. Eric to schedule with Jack and Ed. | Eric |
| 8. | Eric thanked everyone for participating and set a date for next meeting on October 14th at 1:30pm | Eric |
| 9. | Meeting adjourned at 3PM | |

**Identified and Discussed Hazards of Concern**

| Hazard Name | History | Probability | Impact | Comment |
|---|---|---|---|---|
| **Wildfire**[1] | Yes | High | High | Probability and impact are likely to increase as a result of climate change. Staff noted that vegetation removal is needed in the service area to reduce wildfire risk. Staff also noted that wind events are increasingly relevant to wildfire risk as well as PG&E Public Safety Power Shutoff events and how the District can deal with them. |
| **Landslide**[1] | Yes | High | Medium | Occurrences are frequent but limited in overall scale. In the wrong location, could disrupt water distribution. Staff noted that there are many aged roadways across the service area that are susceptible to landslides and could limit staff access to infrastructure. |
| **Flood**[1] | Yes | High | High | Probability and impact are likely to increase as a result of climate and land use changes. There are two treatment sites with high flood exposure. Staff noted that increasing siltation of the river is contributing to flooding. |
| **Earthquake** | No | Low | High | No major faults yet identified within service area, but are located in the region. The impact of a major event would be severe if mains were damaged, related to bridge crossings for example. |
| Drought[1] | No | Medium | Low | Water supply could be potentially disrupted by severe drought conditions, but this is currently unlikely. |
| **Heat**[1] | Yes | High | Medium | Probability and impact are likely to increase as a result of climate change. This relates to days in which the maximum daytime temperature exceeds the 95$^{th}$ percentile annual average. |

*Hazards identified in **bold** were assigned "**High**" probability of occurrence or impact and were therefore determined to be included in the Plan.*

*[1] The influence of climate change will be evaluated with respect to the probability of occurrence for these hazards of concern.*