



## Chapter 2 What's New

**Requirements §201.6(d)(3) and §201.7(d)(3): A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.**

The 2015 Yuba County Local Hazard Mitigation Plan (LHMP) contained descriptions of their planning processes, the risk assessments of identified hazards for the Yuba County Planning Area and mitigation strategies for reducing the risk and vulnerability from these hazards. Since approval of this Plan by FEMA, progress has been made by the County, the two incorporated communities, and 9 special Districts on implementation of the 2015 mitigation strategies. As part of this LHMP Update, a thorough review and update of the 2015 County LHMP was conducted to ensure that this Update reflects current community conditions and priorities in order to realign the updated mitigation strategy for the next five-year planning period. This section of this LHMP Update includes the following:

- **What's New in the Plan Update.** Section 2.1 provides an overview of the approach to updating the Plan and identifies new analyses, data and information included in this LHMP Update to reflect current community conditions. This includes a summary of new hazard and risk assessment data as it relates to the Yuba County Planning Area as well as information on current and future development trends affecting community vulnerability and related issues. The actual updated data, discussions, and associated analyses are contained in their respected sections within this LHMP Update.
- **Summary of Significant Changes to Current Conditions and Hazard Mitigation Program Priorities.** Section 2.2 provides a summary of significant changes in current conditions, changes in vulnerability, and any resulting modifications to the community's mitigation program priorities.
- **2015 Mitigation Strategy Status and Successes.** Section 0 provides a description of the status of mitigation actions from the 2015 LHMP and also indicates whether a project is no longer relevant or is recommended for inclusion in the updated 2021 mitigation strategy. This section also highlights key mitigation success stories of the County and other participating jurisdictions since the 2015 LHMP.

This What's New section provides documentation of Yuba County Planning Area's progress or changes in their risk and vulnerability to hazards and their overall hazard mitigation program. Completion of this LHMP Update further provides documentation of the Yuba County communities' continued commitment and engagement in the mitigation planning process.

### 2.1 What's New in the Plan Update

This LHMP Update involved a comprehensive review and update of each section of the 2015 Plan and includes an assessment of the success of the participating communities in evaluating, monitoring, and implementing the mitigation strategy outlined in the 2015 LHMP. Only the information and data still valid from the 2015 LHMP was carried forward as applicable into this LHMP Update.

Also to be noted, Chapter 7 Implementation and Maintenance of this LHMP Update identifies key requirements for updating future plans:

- Consider changes in vulnerability due to action implementation;
- Document success stories where mitigation efforts have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Incorporate new data or studies on hazards and risks;
- Incorporate new capabilities or changes in capabilities;
- Incorporate growth and development-related changes to inventories; and
- Incorporate new action recommendations or changes in action prioritization.

These requirements and others as detailed throughout this Plan were addressed during this LHMP Update process.

As part of its comprehensive review and update of each section of the Plan, Yuba County and participating jurisdictions recognized that updated data, if available, would enhance the analysis presented in the risk assessment and utilized in the development of the updated mitigation strategy. Highlights of new data used for this LHMP Update is identified below in this section and is also sourced in context within Chapter 4, Risk Assessment. Specific data used is sourced throughout this LHMP Update. This new data and associated analysis provided valuable input for the development of the updated mitigation strategy presented in Chapter 5 of this LHMP Update.

Highlights of new information and analyses contained in this combined LHMP Update includes the following:

- All hazards from the 2015 Plan were profiled in this LHMP Update. New hazards include localized climate change, drought and water shortage, and pandemic. The severe weather hazard was split in to four different hazards: Extreme Cold and Freeze, Extreme Heat, Heavy Rains and Storms, and High Winds and Tornadoes.
- The County updated a list of critical facilities that were spatially quantified in GIS, and then overlaid on each mapped hazard.
- Future development data was updated and collected from the County and Cities. This was spatially quantified in GIS, and then overlaid on each mapped hazard.
- Disaster declarations were updated, including federal, state, and USDA disaster declarations.
- The NCDC Storm Events and FEMA/Cal OES disaster declaration tables were updated.
- A new section on Power Shortage/Failure was added. Public Safety Power Shutoff events were also added.
- Cal-Adapt data was added to the climate change section, as well as to other hazards that are exacerbated by climate change.
- New dam data provided by Cal OES and CA DSOD was used for the dam inventory and analysis. This data included an updated hazard classification for identified dams and updated inundation mapping. Values at risk to dam inundation was analyzed. Critical facilities and populations at risk to dams were tabulated.

- An updated GIS analysis was performed for earthquake, including a Hazus earthquake run to show risk and provide potential loss estimates to the County from earthquake.
- An updated GIS analysis using the 2011 DFIRMs was performed for the flooding hazard for the 1%/0.2% annual chance floods, including values at risk, critical facilities at risk, population at risk, future development, and general community impacts.
- More detailed GIS analysis was performed for the wildfire hazard, including values at risk, critical facilities at risk, population at risk, historic, cultural, and natural locations at risk, and general community impacts.
- An entire rework of the risk assessment for each identified hazard to reflect new information and to reflect the updated FEMA plan review tool. This included reworking the hazard profile and adding sections on location, extent, and new hazard event occurrences; redoing the entire vulnerability analysis to add additional items and updating the vulnerability assessment based on more recent hazard data as well as using the most current parcel and assessor data for the existing built environment to develop loss estimates.
- To better meet the revised FEMA plan review tool, a more extensive analysis of the extents to identified hazards was conducted and included in this LHMP Update.
- A greater study of County and participating jurisdiction’s mitigation capabilities was added.
- Incorporation and analysis of the updated California Department of Finance population data was utilized for this LHMP Update.
- Environmental justice concerns were addressed in portions of this Plan Update.
- Also, as required by current FEMA planning guidance, an analysis of ongoing and continued compliance with the NFIP was included in this LHMP Update.

## 2.2 Summary of Significant Changes to Current Conditions, Planning Area Vulnerability, and Hazard Mitigation Priorities

This section provides a summary by hazard of significant changes in current conditions, Planning Area vulnerability, and any resulting modifications to the community’s mitigation program priorities since the 2015 LHMP:

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Climate Change		X	

- Climate change was not addressed in 2015. Regardless, the effects of climate change are becoming more apparent in the Yuba County Planning Area and all of California.
- NWS data indicates temperatures are increasing resulting in more extreme heat days. 2020 and 2021 temperatures were some of the hottest.
- Weather extremes, including precipitation have become much more variable – the Planning Area is seeing increased precipitation and intensity as well as abnormally dry conditions.
- Data also suggests that changing climate conditions influence the severity of multiple hazards, such as heat, flooding, wildfire, drought, and others, identified in Yuba County.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Dam Failure			X

- With more people moving into dam inundation areas, the vulnerability increases due to an increase in potentially affected populations. Also, with more varied precipitation occurring in the County, this hazard will continue to change.
- Risk increases over years due to aging dam infrastructure. This was evident by the 2017 Oroville spillway incidence.
- Non-jurisdictional dams pose the biggest risk and, over time with little regular maintenance and often located in remote areas with little security, result in an increase in vulnerability to Yuba.
- With newer regulations, other dams are now required to do inundation mapping, develop EAPs, and conduct exercises which help mitigate the risk.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Drought and Water Shortage			X

- Drought conditions since the 2015 LHMP, including water supply issues such as a diminished water table, have had an impact on the Yuba County Planning Area and California. As a result, the drought hazard continues to be a significant priority for mitigation planning.
- Recent drought conditions have contributed to an increase in dry fuels (and tree mortality), and general increase in wildfire conditions.
- Water quality concerns are exacerbated in drought conditions.
- Recent drought conditions stressed crops making them more susceptible to insect infestation and other issues
- Noxious weeds are more drought tolerant – better able to compete for water over local crops and vegetation

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Earthquake		X	

- Overall, Yuba County is in a relatively low to moderate seismically active area.
- The primary factor that might change the earthquake vulnerability is additional development and more people moving to the area. However, adherence to current California building codes should ensure sound development in new development areas.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Flood: 1%/0.2% events		X	

- The risk and vulnerability of 1% and 0.2% flood events remain somewhat constant, changing from year to year based on weather, location, new development, and improvements to the flood control system
- With the winter storms of 2017- 2019, heavy rains resulted in high rivers. This contributed to flooding around the County.
- Effective land use planning and requirements for development in identified floodplains have minimized additional exposure to this hazard in the County. Participation in the NFIP CRS program also helps manage floodplains in the County thus reducing flood vulnerability to County residents.
- Implementation of additional improvements to the flood control system will help reduce this hazard in the future.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Flood: Localized Stormwater Flooding			X

- Climate change issues may result in more localized flooding as the climate warms and more frequent, wetter, and greater intensity storms create more runoff.
- 2017-2019 winter storms, including significant, greater intensity rains, resulted in more localized flooding throughout the Planning Area.
- Outdated and aging drainage infrastructure also contributes to a greater vulnerability to localized, stormwater flooding. This is especially true in areas with limited or no drainage systems.
- Recent drought conditions in some areas have hardened soils and predisposed areas to worse flooding.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Levee Failure		X	

- With more people moving into the Planning Area, the vulnerability to levee failure may increase.
- Ongoing and planned levee improvements will continue to reduce the vulnerability of the County to this hazard.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Pandemic		X	

- Pandemic is a new hazard to the 2021 LHMP Update.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Severe Weather: Extreme Cold and Freeze		X	

- Similar to other weather hazards, the overall vulnerability of the Planning Area changes from year to year depending on the season.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Severe Weather: Extreme Heat			X

- There has been an increase in severe heat days in recent years. 2020 and 2021 were some of the hottest years on record.
- Climate change issues will continue to increase heat related impacts.
- Vulnerable populations located throughout the County are at the greatest risk to this hazard
- The heat, combined with drought conditions, has increased the potential for wildfires.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Severe Weather: Heavy Rains and Storms (Hail, Lightning)			X

- Similar to other weather hazards, the overall vulnerability of the Planning Area changes from year to year depending on the season. The heavy rains and storms of 2017-2019 had been significant, causing flooding and other adverse impacts to the County.
- Climate change brings renewed concern moving forward for heavy and more intense rains, storms and associated issues to the County.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Severe Weather: High Winds and Tornadoes			X

- Similar to other weather hazards, the overall vulnerability of the Planning Area changes from year to year depending on the season.
- High winds exacerbate the spread and intensity of wildfires.
- High winds in recent years have contributed to the potential for a PSPS event to occur in the County.

2021 LHMP Update Hazards	Decrease in Vulnerability	No Change in Vulnerability	Increase in Vulnerability
Wildfire			X

- Compounded by current drought conditions, the wildfire hazard has substantially increased and is no longer just a seasonal issue. The wildfire season, including the potential for a catastrophic wildfire, is now a year around concern.

- The vulnerability of Yuba County to increased occurrence of a devastating wildfire has increased as exacerbated by the recent drought, increases in tree mortality, and overall increase in wildfire conditions and weather.
- The increased development in WUI areas within the County also contributes to an increase in vulnerability.
- Climate change continues to affect the nature and intensity of wildfires.
- Wind has been a major contributor to the potential for a catastrophic wildfire. And when combined with extreme heat, also can trigger a PSPS which leaves the community at risk in other ways.
- With large wildfires occurring throughout California, the Planning Area has seen a significant change in air quality from smoke resulting in more recorded bad air days.
- Catastrophic wildfires in northern California counties have created other issues in the County, as evacuees flee the fires and look to nearby communities for temporary housing.

## 2.3 2015 LHMP Mitigation Strategy Successes and Status

Yuba County and participating jurisdictions have been successful in implementing actions identified in the 2015 Yuba County LHMP Mitigation Strategies, thus, working diligently towards meeting their 2015 goals and objectives of:

- Prevent personal injury, loss of life, and damage to property and the environment from natural hazards;
- Promote public awareness and understanding of natural hazards and the risks they present to quality of life and the economy;
- Enhance the ability of Yuba County and participating jurisdictions to respond to the effects of hazards on people, property, and the environment;
- Continue to support partnerships with private and public sector agencies, businesses, and organizations to further comprehensive planning and implementation of mitigation measures;
- Encourage individual responsibility from Yuba County residents for their exposure to natural hazards and the risk they present to life, property, and the environment; and
- Continue the hazard mitigation planning process in support of the Disaster Mitigation Act 2000 by:
  - ✓ Organizing and Identifying Resources
  - ✓ Assessing Risks and Vulnerabilities
  - ✓ Identifying Hazard Mitigation Measures
  - ✓ Updating Mitigation Plans

### 2.3.1. Success Stories

#### *Storm Drain Improvements*

The County has been working for years to improve drainage in many areas of the County. An example of this is new curb, gutter, sidewalk, and storm drain along Eleventh Avenue in Olivehurst. This can be seen on Figure 2-1.

*Figure 2-1 Paving After Placement of Curbs, Gutters, Sidewalks, and Storm Drains in mid-2021*



Source: Yuba County Public Works

### ***TRLIA Formation and Levee Improvements***

One success story would be the Three Rivers Levee Improvement Authority. The Three Rivers Levee Improvement Authority (TRLIA) is a joint powers agency that was established in May 2004 by the County of Yuba and Reclamation District 784. The County and RD 784 created this JPA to finance and construct levee improvements in south Yuba County.

TRLIA's mission is to provide 200-year flood protection for south Yuba County. TRLIA is completing levee improvements in phases to achieve that goal.

- Improvements to the Western Pacific Interceptor Canal were completed in 2005.
- Improvements to the Yuba River levees were completed in 2012.
- The Bear River Setback Levee replaced portions of the existing Bear River and Feather River levees. This project was completed in 2008, and won Project of the Year.

- The Feather River Levee Improvements were completed in 2009. The Feather River Setback Levee project received an award for the 2009 – Project of the Year from the American Society of Engineers.
- The Yuba Goldfields 100-Year Interim Project was completed in 2017. A new setback levee, the Yuba Goldfields 200-Year Levee Project, will meet Senate Bill 5 requirements for Urban Levee Design Criteria (ULDC) when completed by the end of 2021.
- The Yuba Goldfields North Training Wall, located on the right bank of the Yuba River, is being re-graded to provide long-term stability. Phase 1 construction should finish by end of 2021. Phase 2, which will tie-in the improved levee to the existing high ground near the Hallwood-Cordua Canal, will begin when funding is secured.
- TRLIA, the Sutter Butte Flood Control Agency (SBFCA), the Yuba Water Agency (YWA), the Marysville Levee Commission (MLC), and Reclamation District 1001 (Sutter County) are partners in the Feather River Regional Flood Management Planning program. In 2014, the Partners completed a Regional Flood Management Plan that identified a long-term vision for flood risk reduction in the Feather River Basin, including needed projects and potential costs. Today, the Partners continue work on plan updates and implementation. Program activities are funded by the California Department of Water Resources.

### 2.3.2. 2015 Mitigation Strategy Update

In updating the mitigation strategy status from the 2015 LHMP, it was found that the majority of mitigation actions and projects were essentially duplicated for all four participating jurisdictions, Yuba County, the two Cities, and YCWA, whether or not each jurisdiction actually had a role in the implementation of the project. As a result, the updating of many of these projects by each jurisdiction was a challenge as reflected in the status updates. All efforts were made to reach out to all 2015 plan participants to update this information, and the below status descriptions reflect best available information.

The 2015 Yuba County LHMP mitigation strategy contained 63 separate mitigation actions for the County and participating jurisdictions. Of the 63 actions, 5 have been completed, 27 are ongoing, and 31 have not been started. 9 2015 Yuba County actions have been identified for inclusion in this LHMP Update, and are carried forward in Chapter 5 in Table 5-4. Table 2-1 provides a status summary of the mitigation action projects from the 2015 Yuba County LHMP. Following the table is a description of the status of each project.

*Table 2-1 Yuba County’s 2015 LHMP Update: Mitigation Action Status Summary*

Action Title	Complete	Ongoing	Not Yet Started	In 2021 Plan Update
<b>Yuba County Mitigation Actions</b>				
<b>Multi-Hazard Actions</b>				
Public Education and Awareness Program		X		Y
Geographic Information Systems Mapping Project		X		N
Integrate Local Hazard Mitigation Plan into General Plan		X		Y
Implementation of CRS Activities		X		Y
<b>Earthquake Actions</b>				

Action Title	Complete	Ongoing	Not Yet Started	In 2021 Plan Update
Non-Structural EQ Mitigation Outreach			X	N
Countywide Unreinforced Masonry URM Inventory			X	N
<b>Flood Actions</b>				
Improvements to Emergency Access Roads (South County)		X		N
Road Elevation Project (Plumas-Arboga Road)			X	N
Drainage Capacity Increase (Feather River Blvd & Hwy 70)		X		N
Hazard Specific Flood Annex			X	N
Drainage Capacity Increase (Linda & Woodruff Lane/Ellis Road)		X		N
Toe Drain Increase in Depth (Feather River)			X	N
Prevent Seepage along Bear River (Fill Blanket)	X			N
Bear River Levee Reconstruction (Various Locations)	X			N
WPIC Levee Reconstruction	X			N
Yuba River Levee Berms	X			N
Bingham Interceptor			X	N
Flood Fight Preparedness Training from DWR		X		N
Elevate Pump Motors (#'s 1, 4 & 9)			X	N
S. Dry Creek Levee Improvements near N. Bear River		X		N
200-year Flood Protection		X		N
Regional Drainage Facility			X	N
<b>Severe Weather</b>				
Winter Weather Preparedness Campaign		X		Y
<b>Wildfire</b>				
Fuel Reduction projects Various locations		X		Y
Hydrant System on Willow Glen Road			X	N
<b>City of Marysville Mitigation Actions</b>				
Countywide Public Education and Awareness Program		X		Y
GIS Mapping Project		X		N
Integrate Local Hazard Mitigation Plan into General Plan		X		Y
Implementation of CRS Activities		X		N
Non-Structural EQ Mitigation Outreach		X		N
Countywide Unreinforced Masonry URM Inventory		X		N
Hazard Specific Flood Guidance Annex		X		N
WPIC Levee Reconstruction		X		N
DWR Floodfight Training		X		N
Winter Weather Preparedness Campaign		X		N
Hydrant System		X		N

Action Title	Complete	Ongoing	Not Yet Started	In 2021 Plan Update
<b>City of Wheatland Mitigation Actions</b>				
Countywide Public Education and Awareness Program		X		Y
GIS Mapping Project			X	N
Integrate Local Hazard Mitigation Plan into General Plan		X		Y
Implementation of CRS Activities			X	N
Non-Structural EQ Mitigation Outreach			X	N
Countywide Unreinforced Masonry URM Inventory			X	N
Improvements to Levee Emergency Access Roads (South County)			X	N
Hazard Specific Flood Guidance Annex			X	N
Bear River Levee Reconstruction	X			N
WPIC Levee Reconstruction			X	N
Yuba River Levee Berms			X	N
Bingham Interceptor			X	N
<b>Yuba County Water Agency Mitigation Actions</b>				
<b>Multi-Hazard Actions</b>				
Public Education and Awareness Program		X		N
Geographic Information Systems Mapping Project			X	N
Integrate Local Hazard Mitigation Plan into General Plan			X	N
Implementation of CRS Activities			X	N
<b>Earthquake Actions</b>				
Non-Structural EQ Mitigation Outreach			X	N
Countywide Unreinforced Masonry URM Inventory			X	N
<b>Flood Actions</b>				
Improvements to Emergency Access Roads (South County)			X	N
Road Elevation Project (Plumas-Arboga Road)			X	N
Drainage Capacity Increase (Feather River Blvd & Hwy 70)			X	N
Hazard Specific Flood Annex			X	N
Drainage Capacity Increase (Linda & Woodruff Lane/Ellis Road)			X	N
Toe Drain Increase in Depth (Feather River)			X	N
Prevent Seepage along Bear River (Fill Blanket)			X	N
Bear River Levee Reconstruction (Various Locations)			X	N
WPIC Levee Reconstruction			X	N
Yuba River Levee Berms			X	N
Bingham Interceptor			X	N
Flood Fight Preparedness Training from DWR			X	N
Elevate Pump Motors (#'s 1, 4 & 9)			X	N

Action Title	Complete	Ongoing	Not Yet Started	In 2021 Plan Update
S. Dry Creek Levee Improvements near N. Bear River			X	N
200-year Flood Protection			X	N
Regional Drainage Facility			X	N
<b>Severe Weather</b>				
Winter Weather Preparedness Campaign			X	N
<b>Wildfire</b>				
Fuel Reduction projects Various locations		X		N
Hydrant System on Willow Glen Road			X	N

## *Yuba County Mitigation Actions*

### Multi-Hazard Actions

#### Public Education and Awareness Program

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County has a Program for Public Information (PPI) Committee that annually reviews plans for educating the public and addressing potential flood impacts. The PPI committee annually performs the following tasks:

- Assess Community’s Public Information Needs.
  - ✓ Identify different target areas (flood basins);
  - ✓ Evaluate flood hazards and buildings at risk for each area;
  - ✓ Inventory current and potential outreach activities.
- Update messages for each target audience:
  - ✓ Identify desired outcomes for each message.
- Update outreach projects to convey the messages.
- Examine other public information initiatives.
  - ✓ Website;
  - ✓ Other technical assistance needed for community;
  - ✓ New public speaking opportunities.
- Evaluate prior year’s program.

#### Geographic Information Systems Mapping Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The County is not familiar with what this project entailed. Current GIS program identifies roads, has a layer showing FIRMS, blue-line streams. Project will not be carried forward.

## Integrate Local Hazard Mitigation Plan into General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is ongoing and will be carried forward in this Plan Update. Compliance with AB 2140 is a County priority.

## Implementation of CRS Activities

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Activities are completed as time and funding permits. In 2017, a CRS Certification review was done. This project is ongoing.

## Earthquake Actions

### Non-Structural EQ Mitigation Outreach

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The project was not implemented due to the low-frequency of earthquakes in Yuba County, limited staff and time to pursue these measures.

### Countywide Unreinforced Masonry URM Inventory

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The project was not implemented due to the few buildings containing unreinforced masonry, low-frequency of earthquakes, limited staff and time to pursue these measures.

## Flood Actions

### Improvements to Emergency Access Roads (South County)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County has improved a number of roads throughout the South County, and is continuing to improve others. One major improvement currently in the design phase is the Plumas Lake Interchange – Phase II project that will allow traffic to travel east over the interchange and connect to Plumas-Arboga Road.

### Road Elevation Project (Plumas-Arboga Road)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Improvements to Plumas-Arboga Road will be a part of the Plumas Lake Interchange – Phase II project that will allow traffic to travel east over the interchange and connect to Plumas-Arboga Road.

### Drainage Capacity Increase (Feather River Blvd & Hwy 70)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County has obtained grant funding and is currently in the design phase for a complete-streets rehabilitation of Feather River Boulevard from SR70 to Alicia Avenue. Drainage is a major component of this project. Yuba County is also designing a new detention basin for West Linda that will be located on Cottonwood Avenue between Feather River Boulevard and Grand Avenue.

### Hazard Specific Flood Annex

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not yet started.

### Drainage Capacity Increase (Linda & Woodruff Lane/Ellis Road)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County completed road improvements along both Linda Avenue and Woodruff Lane; those projects also improved drainage.

### Toe Drain Increase in Depth (Feather River)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not started and was replaced with other remediation measures..

### Prevent Seepage along Bear River (Fill Blanket)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is complete.

### Bear River Levee Reconstruction (Various Locations)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Since the 2015 LHMP, three levee segments on the Bear River were improved to meet the 200-year LOP. Project completed; reduced risk from levee seepage and slope stability.

### WPIC Levee Reconstruction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Project completed; reduced risk from seepage and stability.

## Yuba River Levee Berms

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Project completed; reduced risk from seepage and stability.

## Bingham Interceptor

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The status of this project is unknown and is assumed to be not started. It is not being carried forward in this Plan Update.

## Flood Fight Preparedness Training from DWR

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This training is provided annually, and is ongoing.

## Elevate Pump Motors (#'s 1, 4 & 9)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not implemented and is not being carried forward in this plan update.

## S. Dry Creek Levee Improvements near N. Bear River

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The Dry Creek Feasibility Study has not been constructed. An implementing agency has not been identified. In 2020, RD 2103 prepared a grant funding application to CA DWR under the Small Communities Flood Risk Reduction Program (Ph. 2) but did not receive funding for implementation.

## 200-year Flood Protection

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Since the 2015 LHMP, three levee segments on the Bear River were improved to meet the 200-year LOP. Other 200-year levee certification projects are ongoing.

## Regional Drainage Facility

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County and RD784 are working on an updated Climate Change Vulnerability Analysis that will update all H&H models for West Linda, Linda, and Olivehurst. The final product of this analysis will be the basis for developing a comprehensive Capital Improvement Plan (CIP) for a regional stormwater collection, treatment, and disposal system.

## Severe Weather

### Winter Weather Preparedness Campaign

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County has utilized the Office of Emergency Services Facebook page, the Be Prepared Yuba website homepage, interviews with local media outlets, mailers and public events to increase outreach and awareness regarding winter weather events. Regular and pertinent information is released to the public regarding preparedness for winter weather events via the County Public Information Office.

## Wildfire

### Fuel Reduction Projects – Various Locations

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba County has completed 110 miles of shaded fuel breaks in Yuba County. Additionally, the County also constructed 185 acres of shaded fuel breaks under a project funded by the Nonpoint Source Timber Regulation and Forest Restoration Fund. The Yuba County Public Works Department provided project supervision, pre- and post-monitoring, traffic control, project boundary identification, and equipment operators for the fuel reduction efforts.

### Hydrant System on Willow Glen Road

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The project was not implemented due to the difficulty in finding a water source, logistical challenges for installing a main waterline and hydrant lead in that location and the total cost for the project

## *City of Marysville Mitigation Actions*

### Countywide Public Education and Awareness Program

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing, The City of Marysville provides updated information to the community through its website, public counter and by posting information. The updated General Plan Safety Element will be posted to the City’s website for review by the public. It will contain updated information on hazards.

### GIS Mapping Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. The City received an SB 2 Planning Grant. A portion of an SB2 grant is funding the purchase and maintenance of a GIS program to assist the City and its constituents with adequate data. The project will assist the Public Works Department access to more precise data on existing permits and locational data.

### Integrate Local Hazard Mitigation Plan into General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** The City is in the process of updating the Safety Element of the General Plan. Expected to go to the Planning Commission for review September 22, 2021, and to Council for consideration later this fall. The updated Safety Element provides updated information on flood risks, wildfire risks and vulnerabilities. This information will help reduce risks by providing high level policy guidance.

In addition, the City will be kicking off a comprehensive update of the rest of the General Plan later this year. It is expected to be a two-year process and will update land use, transportation, air quality, open space and natural resources etc.

### Implementation of CRS Activities

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. The City’s Public Works Department continues to implement measures to reduce flooding consistent with CRS activities.

### Non-Structural EQ Mitigation Outreach

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):**

Ongoing. City’s Code Enforcement works with the community to identify hazards and educate property owners on risks.

## Countywide Unreinforced Masonry URM Inventory

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Much of the Downtown Historic District is comprised of brick buildings. The City’s updated General Plan Safety Element will include information and policies to address unreinforced masonry buildings. Information will be provided to owners regarding the state’s Historic Building Code.

## Hazard Specific Flood Guidance Annex

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. The City is in the process of recruiting for a new Public Works Director. The City will ensure that employees are provided with information on the Hazard Specific Flood Guidance Annex.

## WPIC Levee Reconstruction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. The City has worked with its partners including the Army Corps on the levee improvement program. This program is improving a 7.5 mile stretch of levees and will provide substantial protection to the City of Marysville. It is expected to be completed in 2024.

## DWR Floodfight Training

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This program is ongoing. Existing and future employees will be trained to ensure that flooding techniques are addressed.

## Winter Weather Preparedness Campaign

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. Public safety personnel coordinate severe weather information.

## Hydrant System

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Ongoing. Fire Department continues to coordinate hydrant systems with partner agencies.

## *City of Wheatland Mitigation Actions*

### Countywide Public Education and Awareness Program

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is ongoing and will be carried forward in this Plan Update.

### GIS Mapping Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Integrate Local Hazard Mitigation Plan into General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is ongoing and will be carried forward in this Plan Update.

### Implementation of CRS Activities

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Non-Structural EQ Mitigation Outreach

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Countywide Unreinforced Masonry URM Inventory

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Improvements to Levee Emergency Access Roads (South County)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

## Hazard Specific Flood Guidance Annex

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Bear River Levee Reconstruction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was completed and will not be carried forward in this Plan Update.

### WPIC Levee Reconstruction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started and will not be carried forward in this Plan Update.

### Yuba River Levee Berms

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started, is not under the purview of the City, and will not be carried forward in this Plan Update.

### Bingham Interceptor

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project was not started, is not under the purview of the City, and will not be carried forward in this Plan Update.

## *Yuba County Water Agency*

### Multi-Hazard Actions

#### Public Education and Awareness Program

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba Water has initiated a public education and awareness campaign that focuses on the Agency’s mission, river maintenance and ecosystems. The program is still in the beginning stages and it is still too early to quantify a reduction in risks.

#### Geographic Information Systems Mapping Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was not an Agency project, was not started, and will not be carried forward.

#### Integrate Local Hazard Mitigation Plan into General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was not an Agency project, was not started, and will not be carried forward.

#### Implementation of CRS Activities

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was not an Agency project, was not started, and will not be carried forward.

### Earthquake Actions

#### Non-Structural EQ Mitigation Outreach

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was not an Agency project, was not started, and will not be carried forward.

#### Countywide Unreinforced Masonry URM Inventory

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This was not an Agency project, was not started, and will not be carried forward.

## Flood Actions

### Improvements to Emergency Access Roads (South County)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by the County of Yuba as the agency responsibility for the roads in South Yuba County

### Road Elevation Project (Plumas-Arboga Road)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by the County of Yuba as the agency responsibility for the roads in South Yuba County.

### Drainage Capacity Increase (Feather River Blvd & Hwy 70)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by the County of Yuba as the agency responsibility for roadside drainage.

### Hazard Specific Flood Annex

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by Yuba County OES as the agency responsibility for disaster preparedness, including the slow-rise flood plan.

### Drainage Capacity Increase (Linda & Woodruff Lane/Ellis Road)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by the County of Yuba as the agency responsibility for roadside drainage.

### Toe Drain Increase in Depth (Feather River)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by Reclamation District 10 as the agency responsibility for the levees.

### Prevent Seepage along Bear River (Fill Blanket)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located.

### Bear River Levee Reconstruction (Various Locations)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located.

### WPIC Levee Reconstruction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located.

### Yuba River Levee Berms

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located.

### Bingham Interceptor

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as flood risk infrastructure construction and maintenance are the responsibility of the respective Reclamation District in which they are located.

### Flood Fight Preparedness Training from DWR

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as flood fight preparedness has historically been a function of the Reclamation Districts.

### Elevate Pump Motors (#'s 1, 4 & 9)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as flood risk infrastructure construction and maintenance are the responsibility of the respective

Reclamation District in which they are located. However, I do believe this work was completed by Reclamation District 784.

### S. Dry Creek Levee Improvements near N. Bear River

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located.

### 200-year Flood Protection

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as levee improvements and maintenance are the responsibility of the respective Reclamation District in which they are located. However, much of the South Yuba County urban areas have achieved a 200-year level of flood protection with the completion of Three Rivers Levee Improvement Authority's (TRLIA) Goldfields Levee project.

### Regional Drainage Facility

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by the County of Yuba as the agency responsibility for roadside drainage.

### Severe Weather

#### Winter Weather Preparedness Campaign

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency and is likely a project initiated by Yuba County OES as the agency responsibility for disaster preparedness

### Wildfire

#### Fuel Reduction Projects Various locations

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** Yuba Water has committed over \$30 million toward forest health management in the Yuba River watershed and has partnered with a number of private, public and non-profit agencies to prevent devastating wildfires. It is still too early to quantify a reduction in risks.

## Hydrant System on Willow Glen Road

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?):** This project is not associated with the Yuba Water Agency, as foothill water supplies, including fire suppression infrastructure, are facilitated by the Irrigation or Fire Protection Districts in which they are located.