



Chapter 5 Mitigation Strategy

44 CFR §201.6(c)(3) and §201.7(c)(3): [The plan shall include] a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

This section describes the mitigation strategy process and mitigation action plan for this 2024 Colusa County LHMP Update. It describes how all the participating jurisdictions met the following requirements from the 10-step planning process:

- Planning Step 6: Set Goals
- Planning Step 7: Review Possible Activities
- Planning Step 8: Draft an Action Plan

5.1 Mitigation Strategy: Overview

The results of the planning process, the risk assessment, the goal setting, the identification of mitigation actions, and the hard work of the HMPC led to the mitigation strategy and mitigation action plan for this LHMP Update. As part of the LHMP Update process, a comprehensive review and update of the mitigation strategy portion of the 2018 Colusa County LHMP was conducted. Some of the initial goals and objectives from the previous LHMP were refined and reaffirmed, some goals were deleted, and others were added. The end result was a new set of goals, to reflect the completion of, or progress towards the 2018 mitigation actions, the updated risk assessment, and the new priorities of participating jurisdictions and this 2024 LHMP Update.

To support the updated mitigation strategy including updated goals, the mitigation actions from the 2018 LHMP were reviewed and assessed for their value in reducing risk and vulnerability to the Colusa County Planning Area from identified hazards and further evaluated for their inclusion in this LHMP Update (See Chapter 2 What's New). Section 5.2 below identifies the new goals and objectives of this 2024 LHMP Update and Section 5.4 details the new mitigation action plan.

Taking all of the above into consideration, the participating jurisdictions and HMPC developed the following umbrella mitigation strategy for this LHMP Update:

- Communicate the hazard information collected and analyzed through this planning process as well as mitigation success stories so that the community better understands what can happen where and what they themselves can do to be better prepared.
- Implement the mitigation action plan recommendations of this Plan.
- Use existing rules, regulations, policies, and procedures already in place.
- Monitor multi-objective management opportunities so that funding opportunities may be shared and packaged, and broader constituent support may be garnered.

5.1.1. Continued Compliance with NFIP

Given the nature and extent of the flood hazard in the Colusa County Planning Area, an emphasis will be placed on continued compliance with the National Flood Insurance Program (NFIP) by all communities. This Chapter 5 of the Base Plan for the County and the jurisdictional annexes for the two cities, as the three eligible NFIP communities, provides an overview of their flood management programs and continued compliance with the NFIP. While Tribal governments are eligible for participation in the NFIP, very few actually participate. The Kletsel Dehe Winton Nation, as a Tribal government participating in this LHMP Update, does not have any identified flood-prone areas, and thus does not participate in the NFIP. Although the participating districts to this LHMP Update are not eligible NFIP communities, many of their mitigation actions and projects contain measures to promote effective floodplain management throughout the Colusa County Planning Area.

To participate in the NFIP a community must adopt and enforce floodplain management regulations that meet or exceed the minimum requirements of the Program. These requirements are intended to prevent loss of life and property and to reduce taxpayer's costs for disaster relief as well as minimize economic and social hardships that result from flooding. Participation in the NFIP provides a community with access to flood insurance.

Detailed below is a description of the County's flood management program to ensure continued compliance with the NFIP. Also to be considered are the flood mitigation actions contained in this LHMP that support the ongoing efforts by the County to minimize the risk and vulnerability of the community to the flood hazard and to enhance their overall floodplain management program.

Colusa County's Flood Management Program

Colusa County has participated in the Regular Phase of the NFIP since September 18, 1985. Since then, the County has administered floodplain management regulations that meet the minimum requirements of the NFIP. Under that arrangement, residents and businesses paid the same flood insurance premium rates as most other communities in the country.

The Community Rating System (CRS), a voluntary program under the NFIP, was created in 1990. It is designed to recognize floodplain management activities that go above and beyond the NFIP's minimum requirements. If a community implements public information, mapping, regulatory, loss reduction and/or flood preparedness activities and submits the appropriate documentation to FEMA, then its residents can qualify for a flood insurance premium rate reduction. The County does not currently participate in the CRS program.

Presently, the County manages its floodplains in compliance with NFIP requirements and implements a floodplain management program designed to protect the people and property of the County. Floodplain regulations are a critical element in local floodplain management and are a primary component in the County's participation in the NFIP.

The County will continue to manage their floodplains in continued compliance with the NFIP. An overview of the County's NFIP status and floodplain management program is discussed on Table 5-1.

Table 5-1 Colusa County NFIP Status

NFIP Topic	Comments
Staff Resources	
Who is responsible for floodplain management in your community? Provide Department/Title. Do they serve any roles other than Community Floodplain Administrator (FPA)?	The director of public works is designated the floodplain administrator. The floodplain administrator shall have the authority to delegate performance of certain duties to other employees. The director of public works has other roles.
Is the Community FPA or NFIP Coordinator a Certified Floodplain Manager?	No, Not required per County Code (Chapter 33)
Is floodplain management an auxiliary function?	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Permit review, Elevation Certificates education, and outreach
What are the barriers to running an effective NFIP program in the community, if any?	Existing budgets and hydraulic modeling deficiencies.
Insurance Summary	
How many NFIP policies are in the community? What is the total premium and coverage?	243 policies \$153,363 in annual premiums \$65,642,000 of insurance in force
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	142 paid losses \$3,120,730 in paid claims. 7 substantial damage claims
How many structures (residential and non-residential) are exposed to flood risk within the community?	1,468 in 1% annual chance flood zone 1,059 in 0.2% annual chance flood zone
Are there Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL) structures in the community? (from CIS*)	25 RL 0 SRL
Are there Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL) structures in the community? (from PIVOT*)	19 RL 4 SRL
Describe any areas of flood risk with limited NFIP policy coverage	Flood insurance coverage within 1% annual chance floodplain is only 11.5% now that the remapping exercise has been completed and new flood maps are in effect as of March 27, 2024
How does the community teach property owners or other stakeholders about the importance flood insurance?	Flyers, social media outreach, and other efforts are used. City website is also used.
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does the community use?	DFIRMs are used.
Compliance History	
Is the community in good standing with the NFIP?	Y
Are there any outstanding compliance issues (i.e., current violations)?	N

NFIP Topic	Comments
Who is responsible (Department, Title) for making substantial damage/improvement determinations? How does the community identify substantially damaged/improved structures? What is the process to make sure these structures are brought into compliance?	For applications for building permits to improve buildings and structures, including alterations, movement, repair, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the floodplain administrator, in coordination with the building official, shall: (a) Estimate the market value, or require the applicant to obtain a professional appraisal prepared by a qualified independent appraiser of the market value, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made. (b) Compare the cost to perform the improvement, the cost to repair the damaged building to its predamaged condition, or the combined costs of improvements and repairs, where applicable, to the market value of the building or structure. (c) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage. (d) Notify the applicant when it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the building code is required and notify the applicant when it is determined that work does not constitute substantial improvement or repair of substantial damage.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	CAV – 6/18/2020
Is a CAV or CAC scheduled or needed?	No
Regulation	
When did the community enter the NFIP?	9/18/1985
Are the FIRMs digital or paper?	Digital
Has the community adopted the NFIP minimum floodplain management criteria via local regulation? Date of current local regulation?	NFIP minimum regulations have been adopted. Most recently in 2020.
Has the community adopted the latest effective FIRM? Date adopted?	Yes. Most recently in 2020.

NFIP Topic	Comments
How does the community enforce local floodplain regulations and monitor compliance?	The floodplain administrator shall coordinate with and provide comments to the building official to administer and enforce the flood provisions of the building code and to ensure compliance with the applicable provisions of these regulations. The floodplain administrator and the building official have the authority to establish written procedures for reviewing applications and conducting inspections for buildings and for administering and documenting determinations of substantial improvement and substantial damage made.
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Meets.
How are Letters of Map Change (LOMCs) tracked and compiled?	New DFIRMs are downloaded regularly which include the latest LOMCs, LOMRs, and CLOMRs.
Provide an explanation of the permitting process.	If a property is to be developed in a floodplain, the building department coordinates flood zone development/elevation certificate requirements with the Flood Zone Administrator to ensure that the development is built to conform to the County floodplain ordinance.
Community Rating System	
Does the community participate in CRS? If so, what is the community's CRS Class Ranking?	No
What categories and activities provide CRS points and how can the class be improved?	N/A
Does the plan include CRS planning requirements?	N/A

Source: FEMA CIS, FEMA PIVOT, Colusa County

*FEMA CIS and PIVOT databases record this data differently. CIS does not differentiate between RLs that have been mitigated, while PIVOT removes mitigated properties from the RL list. CIS contains only Post-FIRM SRL properties, while PIVOT contains both Pre- and Post-FIRM SRL properties.

5.1.2. Integration of Mitigation with Post Disaster Recovery and Mitigation Strategy Funding Opportunities

Hazard mitigation actions are essential to weaving long-term resiliency into all community recovery efforts so that at-risk infrastructure, development, and other community assets are stronger and more resilient for the next severe storm or hazard event. Mitigation measures to reduce the risk and vulnerability of a community to future disaster losses can be implemented in advance of a disaster event and also as part of post-disaster recovery efforts.

Mitigation applied to recovery helps communities become more resilient and sustainable. It is often most efficient to fund eligible infrastructure mitigation through FEMA's Public Assistance mitigation program if the asset was damaged in a storm event. Mitigation work can be added to project worksheets if they can be proven to be cost-beneficial.

Integration of mitigation into post disaster recovery efforts should be considered by all communities as part of their post disaster redevelopment and mitigation policies and procedures. Post-disaster redevelopment and mitigation policies and procedures are evaluated and updated as part of the Emergency Operations Plan (EOP) updates and other emergency management plans for each community.

These EOP's and other emergency management documents, through its policies and procedures, seek to mitigate the effects of hazards, prepare for measures to be taken which will preserve life and minimize damage, enhance response during emergencies and provide necessary assistance, and establish a recovery system in order to return the community to their normal state of affairs. Mitigation is emphasized as a major component of recovery efforts.

Mitigation Strategy Funding Opportunities

An understanding of the various funding streams and opportunities enable the communities to match identified mitigation projects with the grant programs that are most likely to fund them. Additionally, some of the funding opportunities can be utilized together. Mitigation grant funding opportunities available pre- and post- disaster include the following.

FEMA HMA Grants

Cal OES administers four main types of HMA grants: (1) Hazard Mitigation Grant Program, (2) Pre-Disaster Mitigation Program, (3) Flood Mitigation Assistance Program, and (4) Building Resilient Infrastructure and Communities. Eligible applicants for the HMA include state and local governments, certain private non-profits, and federally recognized Indian tribal governments. While private citizens cannot apply directly for the grant programs, they can benefit from the programs if they are included in an application sponsored by an eligible applicant.

FEMA Public Assistance Section 406 Mitigation

The Robert T. Stafford Disaster Relief and Emergency Assistance Act provides FEMA the authority to fund the restoration of eligible facilities that have sustained damage due to a presidentially declared disaster. The regulations contain a provision for the consideration of funding additional measures that will enhance a facility's ability to resist similar damage in future events.

Community Development Block Grants

The California Department of Housing and Community Development administers the State's Community Development Block Grant (CDBG) program with funding provided by the U.S. Department of Housing and Urban Development. The program is available to all non-entitlement communities that meet applicable threshold requirements. All projects must meet one of the national objectives of the program – projects must benefit 51 percent low- and moderate-income people, aid in the prevention or clearance of slum and blight, or meet an urgent need. Grant funds can generally be used in federally declared disaster areas for CDBG eligible activities including the replacement or repair of infrastructure and housing damaged during, or as a result of, the declared disaster.

Small Business Loans

SBA offers low-interest, fixed-rate loans to disaster victims, enabling them to repair or replace property damaged or destroyed in declared disasters. It also offers such loans to affected small businesses to help them recover from economic injury caused by such disasters. Loans may also be increased up to 20 percent of the total amount of disaster damage to real estate and/or leasehold improvements to make improvements that lessen the risk of property damage by possible future disasters of the same kind.

Increased Cost of Compliance

Increased Cost of Compliance (ICC) coverage is one of several resources for flood insurance policyholders who need additional help rebuilding after a flood. It provides up to \$30,000 to help cover the cost of mitigation measures that will reduce flood risk. ICC coverage is a part of most standard flood insurance policies available under NFIP.

5.2 Goals and Objectives

44 CFR §201.6(c)(3)(i) and §201.7(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Up to this point in the planning process, the participating jurisdictions, along with the HMPC, have organized resources, assessed hazards and risks, and documented mitigation capabilities. The resulting goals, objectives, and mitigation actions were developed based on these tasks. The HMPC held a series of meetings and exercises designed to achieve a collaborative mitigation strategy as described further throughout this section. Appendix C documents the information covered in these mitigation strategy meetings, including information on the goals development and the identification and prioritization of mitigation alternatives by the HMPC and participating jurisdictions.

During the initial goal-setting meeting, the HMPC reviewed the results of the hazard identification, vulnerability assessment, and capability assessment. This analysis of the risk assessment identified areas where improvements could be made and provided the framework for the HMPC to formulate planning goals and objectives and to develop the mitigation strategy for the Colusa County Planning Area.

Goals were defined for the purpose of this mitigation plan as broad-based public policy statements that:

- Represent basic desires of the community;
- Encompass all aspects of community, public and private;
- Are nonspecific, in that they refer to the quality (not the quantity) of the outcome;
- Are future-oriented, in that they are achievable in the future; and
- Are time-independent, in that they are not scheduled events.

Goals are stated without regard to implementation. Implementation cost, schedule, and means are not considered. Goals are defined before considering how to accomplish them so that they are not dependent on the means of achievement. Goal statements form the basis for objectives and actions that will be used as means to achieve the goals. Objectives define strategies to attain the goals and are more specific and measurable.

HMPC members were provided with the list of goals from the 2018 LHMP as well as a list of other sample goals to consider. The team was told that they could use, combine, or revise the statements provided or develop new ones, keeping the risk assessment in mind. Each member was asked to provide three goal statements. Goal statements were collected and grouped into similar themes and provided to the HMPC. Some of the statements were determined to be better suited as objectives or actual mitigation actions and were set aside for later use. Next, the HMPC developed objectives that summarized strategies to achieve each goal. Edits and refinements to these new goals and resulting objectives were provided by the HMPC until the team came to consensus on the final goals and objectives for this 2024 LHMP Update.

Based on the risk assessment review and goal setting process, the HMPC identified the following goals, which provide the direction for reducing future hazard-related losses within the Colusa County Planning Area.

Goal 1: Minimize risk and vulnerability of Colusa County to natural hazards (including climate change considerations) and protect lives and prevent losses to property, public health, economy, and the environment

- Provide protection for existing and future development
- Provide protection for critical facilities, infrastructure, and services and minimize disruptions
- Provide protection for natural resources
- Reduce the number of emergency incidents
- Consider future impacts of climate change in natural hazard mitigation
- Foster an economy that promotes and values a proactive approach to mitigation
- Preserve the functionality of property, economy, and commerce, that may be affected by infrastructure vulnerability

Goal 2: Increase community/public outreach, education, and awareness for all hazards to minimize hazard-related losses

- Increase public awareness of hazard risk, vulnerability, and mitigation
- Enhance outreach and education of community members to promote a hazard resilient community
- Educate citizens and farmers on water conservation methods to provide protection from future hazard events and build support for water storage projects
- Educate and increase awareness and understanding of migrant and other transient residents on hazards and natural hazard mitigation
- Increase education and awareness and ensure adequate resources among historically underserved populations, individual with access and functional needs, and populations impacted by natural hazards and disasters

Goal 3: Improve communities' capabilities to prevent/mitigate hazard-related losses and to be prepared for, respond to, and recover from a disaster event

- Increase communities' capabilities to respond to increased climate impacts, (e.g., legislation, education, projects)
- Make better use of technology to predict and mitigate damage
- Increase the use of shared resources and multi-agency efforts
- Continued improvements to emergency services and public safety capabilities

- Increase participation by all County entities and agencies operating in Colusa County in disaster planning activities to improve hazard awareness, intra-and inter-agency communications, mitigation action implementation, and coordinated response and recovery efforts
- Enhance Tribal coordination for disasters
- Maintain Colusa County communities' eligibility for FEMA grant funding and other FEMA programs

Goal 4: Build capacity and capabilities to increase disaster resilience among historically underserved populations, individuals with access and functional needs, and communities disproportionately impacted by disasters and climate change

- Increase education, outreach, and awareness of natural hazards and disasters and ensure adequate resources with a focus on the whole community
- Reduce hazard risk and vulnerability and increase disaster resilience through the equitable and accessible planning and implementation of hazard mitigation actions and priorities
- Enhance natural hazard mitigation strategies to protect the most rural, vulnerable areas

Goal 5: Improve community resiliency to flooding in Colusa County

- Reduce the flood risk and vulnerability in Colusa County
- Reduce life safety issues, property loss, and damages associated with flooding
- Reduce flooding adjacent to streams, residential areas, and areas with critical infrastructure
- Improve stream flow to reduce bank erosion
- Maintain/improve flood protection and control measures, including maintenance and improvements to the levee systems, to minimize future flood related impacts and damages

Goal 6: Continue to protect and promote Colusa County agriculture by ensuring safe and effective farming practices that protect the citizens and environment and that minimize future hazard related losses

- Reduce the impacts to and loss of agricultural resources from natural hazards and disasters
- Support and implement water projects that replenish the aquifer, increase available agricultural water during critical times of need for local crops, and ensure a consistent water supply and distribution to County residents.
- Educate County citizens as to how they can help protect Colusa's agriculture from noxious weeds and pests
- Work with local farmers to keep canals, ditches, and streambeds clear of debris reducing downstream flooding and other impacts

5.3 Identification and Analysis of Mitigation Actions

44 CFR §201.6(c)(3)(ii) and §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

In order to identify and select mitigation actions to support the mitigation goals, each hazard identified in Section 4.1 was evaluated at the completion of the risk assessment as part of the second prioritization process to determine which hazards were priorities for mitigation strategy planning. Only those hazards

that were determined to be a priority hazard for each participating jurisdiction were considered further in the development of hazard-specific mitigation actions. Those hazards not considered a priority for mitigation strategy development were eliminated from further consideration because the risk of a hazard event to the participating jurisdiction is unlikely, the vulnerability of the participating jurisdiction is low, or capabilities are already in place to mitigate adverse impacts. Further, the resulting mitigation strategy presented in this Chapter focuses on those mitigation actions that each jurisdiction has the authority, resources, and capacity to consider for implementation over the next 5-years covered by this LHMP Update. Table 5-2 and Table 5-3 provide a listing of priority hazards by jurisdiction to be addressed in the mitigation strategy portion of this Plan.

Note: originally landslide and subsidence were priority hazards for Colusa County. After review of the hazards, possible mitigation actions, and the County’s current capabilities, these hazards were moved to low priority hazards for mitigation planning.

Table 5-2 Colusa County Planning Area: Mitigation Action Priority Hazards by Jurisdiction

Hazard	Colusa County	City of Colusa	City of Williams	Colusa County RCD	Cortina CSD
Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds)	X			X	
Climate Change	X		X	X	
Dam Failure	X	X			
Drought & Water shortage	X	X	X	X	
Earthquake	X	X	X		
Floods: 1%/0.2% annual chance	X	X	X		X
Floods: Localized Stormwater	X	X	X	X	X
Landslide, Mudslide, and Debris Flow					
Levee Failure	X	X			
Severe Weather: Extreme Cold and Freeze	X				
Severe Weather: Extreme Heat	X				
Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning)	X	X	X		
Severe Weather: High Winds and TORNADOS	X				
Stream Bank Erosion	X		X	X	X
Subsidence				X	
Wildfire	X		X	X	

Table 5-3 Colusa County Planning Area: Mitigation Action Priority Hazards by Jurisdiction

Hazard	Kletsel Dehe Wintun Nation	RD 108	RD 479	Sacramento Westside Levee District
Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds)				
Climate Change	X		X	
Dam Failure				
Drought & Water shortage	X			
Earthquake				
Floods: 1%/0.2% annual chance		X	X	X
Floods: Localized Stormwater		X	X	X
Landslide, Mudslide, and Debris Flow	X			
Levee Failure		X	X	X
Severe Weather: Extreme Cold and Freeze				
Severe Weather: Extreme Heat	X			
Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning)				
Severe Weather: High Winds and TORNADOS				
Stream Bank Erosion	X		X	
Subsidence				
Wildfire	X			

It is important to note, however, that all the Hazards addressed in this LHMP are included in the multi-hazard public awareness mitigation actions as well as in other multi-hazard, emergency management actions, and other hazard-specific actions, providing benefits to all participating jurisdictions to this 2024 LHMP Update.

Once it was determined which hazards warranted the development of specific mitigation actions, the participating jurisdictions and HMPC analyzed viable mitigation options that supported the identified goals and objectives. The HMPC was provided with the following list of categories of mitigation actions, which originate from the Community Rating System:

- Prevention
- Property protection
- Structural projects
- Natural resource protection
- Emergency services
- Public information

The HMPC was provided with examples of potential mitigation actions for each of the above categories. The Planning Committee was also instructed to consider both future and existing buildings in considering

possible mitigation actions. A facilitated discussion then took place to examine and analyze the options. Appendix C provides a detailed review and discussion of the six mitigation categories to assist in the review and identification of possible mitigation activities or projects. Also utilized in the review of possible mitigation measures is FEMA's publication on Mitigation Ideas, by hazard type. Prevention type mitigation alternatives were discussed for each of the priority hazards. This was followed by a brainstorming session that generated a list of preferred mitigation actions by hazard.

5.3.1. Prioritization Process

Once the mitigation actions were identified, the HMPC was provided with several decision-making tools, including FEMA's recommended prioritization criteria, STAPLEE sustainable disaster recovery criteria; Smart Growth principles; and others, to assist in deciding why one recommended action might be more important, more effective, or more likely to be implemented than another. STAPLEE stands for the following:

- Social: Does the measure treat people fairly? (e.g., different groups, different generations)
- Technical: Is the action technically feasible? Does it solve the problem?
- Administrative: Are there adequate staffing, funding, and other capabilities to implement the project?
- Political: Who are the stakeholders? Will there be adequate political and public support for the project?
- Legal: Does the jurisdiction have the legal authority to implement the action? Is it legal?
- Economic: Is the action cost-beneficial? Is there funding available? Will the action contribute to the local economy?
- Environmental: Does the action comply with environmental regulations? Will there be negative environmental consequences from the action?

In accordance with the DMA requirements, an emphasis was placed on the importance of a benefit-cost analysis in determining action priority. Other criteria used to assist in evaluating the benefit-cost of a mitigation action includes:

- Contribution of the action to save life or property
- Availability of funding and perceived cost-effectiveness
- Available resources for implementation
- Ability of the action to address the problem

The initial list of mitigation actions from the 2018 LHMPs and new actions identified during this planning process were reviewed and prioritized using the criteria (alternatives and selection criteria) in Appendix C.

With these criteria in mind, the HMPC were each given a set of 18 colored dots, six each of red, blue, and green. The dots were assigned red for high priority (worth five points), blue for medium priority (worth three points), and green for low priority (worth one point). The HMPC was asked to use the dots to prioritize actions with the above criteria in mind. The point score for each action was totaled. Appendix C contains the total score given to each identified mitigation action.

The process of identification and analysis of mitigation alternatives allowed the HMPC to come to consensus and to prioritize recommended mitigation actions. During the voting process, emphasis was placed on the importance of a benefit-cost review in determining project priority; however, this was not a quantitative analysis. The team agreed that prioritizing the actions collectively enabled the actions to be

ranked in order of relative importance and helped steer the development of additional actions that meet the more important objectives while eliminating some of the actions which did not garner much support.

Benefit-cost was also considered in greater detail in the development of the Mitigation Action Plan detailed below in Section 5.4. The cost-effectiveness of any mitigation alternative will be further considered in greater detail through performing benefit-cost project analyses when seeking FEMA mitigation grant funding for eligible actions associated with this 2024 LHMP Update.

Recognizing the limitations in prioritizing actions from multiple jurisdictions and departments and the regulatory requirement to prioritize by benefit-cost to ensure cost-effectiveness, the participating jurisdictions and HMPC decided to pursue actions that contributed to saving lives and property as first and foremost, with additional consideration given to the benefit-cost aspect of a project. This process drove the development of a determination of a high, medium, or low priority for each mitigation action, and a comprehensive prioritized mitigation action plan for the Colusa County Planning Area.

5.4 Mitigation Action Plan

44 CFR §201.6(c)(3)(iii) and §201.7(c)(3)(iii): [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

This mitigation action plan was developed to present the recommendations developed by the HMPC for how the Colusa County Planning Area can reduce the risk and vulnerability of people, property, critical facilities and infrastructure, natural and cultural resources, and the economy to future disaster losses. Emphasis was placed on both future and existing development. This mitigation action plan summarizes who is responsible for implementing each of the prioritized actions as well as when and how the actions will be implemented. Each action summary also includes a discussion of the benefit-cost review conducted to meet the regulatory requirements of the Disaster Mitigation Act.

Table 5-4 identifies all mitigation actions for participating jurisdictions to this LHMP Update. For each mitigation action item included in Table 5-4, a detailed mitigation implementation strategy has been developed. The detailed descriptions for each mitigation action are included in each respective jurisdictional annex to this LHMP.

The mitigation action plan summarized below contains both new action items developed for this 2024 LHMP Update as well as old actions that were yet to be completed from the 2018 LHMP. Table 5-4 indicates whether the action is new or from the 2018 LHMP and Chapter 2 contains the details for each 2018 mitigation action item indicating whether a given action item has been completed, deleted, or deferred.

As described throughout this 2024 LHMP Update, the Colusa County Planning Area has many risks and vulnerabilities to identified hazards. Although many possible mitigation actions, as detailed in Appendix C, were brainstormed and prioritized during the mitigation strategy meetings, the resulting mitigation strategy presented in this Chapter 5 of this LHMP focuses only on those mitigation actions that are both reasonable and realistic for the communities to consider for implementation over the next 5-years covered by this 2024 Update. Thus, only a portion of the actions identified in Appendix C have been carried forward into the mitigation strategy presented in Table 5-4. Although many good ideas were developed during the mitigation action brainstorming process, the reality of determining which priority actions to develop and include in this LHMP Update came down to the actual priorities of communities, individuals and departments based in part on department direction, staffing, and available funding. The overall value of the mitigation action table in Appendix C is that it represents a wide-range of mitigation actions that can be consulted and developed for this LHMP Update during annual plan reviews and the formal 5-year update process.

It is also important to note that the participating jurisdictions have numerous existing, detailed action descriptions, which include benefit-cost estimates, in other planning documents, such as stormwater and drainage plans, flood and water management plans, fire plans, climate plans, and capital improvement budgets and reports. These actions are considered to be part of this LHMP, and the details, to avoid duplication, should be referenced in their original source document. The HMPC also realizes that new

needs and priorities may arise as a result of a disaster or other circumstances and reserves the right to support new actions, as necessary, as long as they conform to the overall goals of this LHMP Update.

Further, it should be clarified that the actions included in this mitigation strategy are subject to further review and refinement; alternatives analyses; and reprioritization due to funding availability and/or other criteria. The participating jurisdictions are not obligated by this document to implement any or all of these projects. Rather this mitigation strategy represents the desires of the jurisdictions to mitigate the risks and vulnerabilities from identified hazards. The actual selection, prioritization, and implementation of these actions will also be further evaluated in accordance with the mitigation categories and criteria contained in Appendix C.

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the public outreach actions, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this 2024 LHMP Update.

Table 5-4 Colusa County Planning Area Mitigation Actions

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Colusa County					
Multi-Hazard Actions					
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Previous Action	X	X		Prevention
Action 2. Public Education and Community Outreach Countywide	Previous Action	X	X	X	Public Education
Action 3. Alert and Warning System for Sheriff's Office and Public Health	New Action	X	X		Emergency Services
Action 4. Technology Enhancements to Support Hazard Mitigation Planning and Project Implementation and for use in Disaster Preparedness, Response, and Recovery Efforts (e.g., GIS Application Enhancements)	New Action	X	X	X	Prevention Public Information Emergency Services Property Protection
Action 5. Vulnerable Population Planning	New Action	X	X		Prevention Public Information Emergency Services
Action 6. Update 211 system	New Action	X	X		Emergency Services
Action 7. Coordinate with the American Red Cross (ARC) for Mass Care Planning	New Action	X	X		Prevention Public Information Emergency Services
Action 8. Vulnerable Population Planning (with a focus on Access and Functional Needs)	New Action	X	X		Prevention Public Information Emergency Services
Action 9. Coordination with Community Based Organizations	New Action	X	X		Prevention Public Information Emergency Services
Action 10. Enhance Tribal Coordination for Disasters	New Action	X	X		Prevention Emergency Services
Action 11. Generator Purchases to Enhance Project Power for Colusa County	New Action	X	X	X	Emergency Services Property Protection
Action 12. EOP Update & Implementation	New Action	X	X		Prevention Emergency Services
Action 13. Evacuation Planning Countywide	Previous Action	X	X		Emergency Services
Action 14. Migrant Center Improvements/House Vulnerable Populations During Disaster	New Action	X	X		Emergency Services
Action 15. Install Road Closure Infrastructure	New Action	X	X		Emergency Services

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Agricultural Hazards: Severe Weather/Invasive Species (Pests and Weeds)					
Action 16. Pest and Rodent Prevention Project for Infrastructure Protection	New Action	X	X		Prevention Property Protection
Action 17. Development of Ordinance and Zoning to Limit/Manage Pest Introduction into Colusa County	New Action	X	X		Prevention
Action 18. Abandoned Agricultural Lands Pest Management (joint with RCD)	New Action	X	X		Property Protection Natural Resource Protection
Climate Change Actions					
Action 19. Climate Change Mitigation Adaptation Action Plan	New Action	X	X	X	Prevention
Action 20. Climate-smart Agricultural Planning (joint with RCD)	New Action	X	X		Property Protection Natural Resource Protection
Dam Failure Actions					
Action 21. Continue Communication about Dam Safety and Awareness County-wide	New Action	X	X	X	Prevention Public Information Emergency Services
Action 22. Dam Failure Mitigation, Education, and Awareness	Previous Action	X	X	X	Prevention Public Information Emergency Services
Drought and Water Shortage Actions					
Action 23. Groundwater Recharge (joint with RCD)	New Action	X	X		Property Protection Structural Projects Natural Resource Protection
Action 24. Invasive Species Removal from Waterways (joint with RCD)	New Action	X	X	X	Property Protection Natural Resource Protection
Action 25. Irrigation Efficiency Technical Assistance (joint with RCD)	New Action	X	X		Property Protection Natural Resource Protection
Action 26. On-farm Water Storage Projects (joint with RCD)	New Action	X	X		Property Protection Structural Projects Natural Resource Protection
Earthquake Actions					
Action 27. Earthquake Vulnerability Study and Retrofitting of County Structural Assets	Previous Action	X	X		Prevention Structural

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Flood, Localized Flood, Levee Failure, and Heavy Rains and Storm Actions					
Action 28. Flood ordinance updates		X	X	X	Prevention
Action 29. Localized Stormwater Management and Streambank Erosion Mitigation (joint with RCD)	New Action	X	X	X	Prevention Property Protection Natural Resource Protection
Action 30. Princeton Storm Water Drainage Assessment	Previous Action	X	X	X	Prevention Property Protection Natural Resource Protection
Action 31. Roadway Flood Prevention	New Action	X	X	X	Prevention Property Protection Structural Projects Natural Resource Protection
Severe Weather Actions					
Action 32. Sheltering for Unhoused (winter weather)	New Action	X	X		Prevention Emergency Services
Action 33. Sheltering for Unhoused (Extreme Heat)	New Action	X	X		Prevention Emergency Services
Action 34. Severe Weather Plan Update	New Action	X	X	X	Prevention Emergency Services
Wildfire Actions					
Action 35. Beetle-killed Tree Removal (joint with RCD)	New Action	X	X		Natural Resource Protection Prevention Property Protection
Action 36. Update and Implement Community Wildfire Protection Plan (joint with RCD)	New Action	X	X		Natural Resource Protection Prevention Property Protection
Action 37. Colusa County Fire Mitigation Plan of 2024 Implementation (joint with RCD)	New Action	X	X		Natural Resource Protection Prevention Property Protection
Action 38. Colusa County Fire Safe Council (joint with RCD)	New Action	X	X		Natural Resource Protection Prevention Property Protection
City of Colusa					
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Previous Action	X	X		Prevention

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	New Action	X	X	X	Public Education
Action 3. Evacuation Training for the Community of Colusa	New Action				Emergency Services
Action 4. Fire and sanitation water is needed in case of emergency in the City of Colusa during a drought	New Action	X	X		Prevention Emergency Services Property Protection
Action 5. URM Mapping and Identification	Previous Action	X	X		Prevention Property Protection
Action 6. Project improvements to Decrease Flooding	New Action	X	X	X	Property Protection Structural Projects
Action 7. Levee Mitigation	New Action	X	X	X	Property Protection Structural Projects
Action 8. Colusa Basin Drain	New Action	X	X	X	Property Protection Structural Projects
City of Williams					
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Previous Action	X	X		Prevention
Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	New Action	X	X	X	Public Information
Action 3. Aquifer Recharge Project	New Action	X	X		Property Protection Natural Resource Protection
Action 4. Storm Drain Master Plan	Previous Action	X	X	X	Property Protection Structural Projects Natural Resource Protection
Action 5. Salt Creek Erosion Control	New Action	X	X	X	Property Protection Natural Resource Protection
Action 6. Underground Powerlines	New Action	X	X		Property Protection Structural Projects
Action 7. Healthy Trees Program	New Action	X	X		Property Protection Natural Resource Protection
Action 8. EQ Vulnerability Study and Retrofit of City Assets	Previous Action	X	X		Property Protection
Action 9. Detention Basin Construction (continuing from the 2018 LHMP)	Previous Action	X	X	X	Natural Resource Protection

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Colusa County RCD					
Action 1. Abandoned Agricultural Lands Pest Management	New Action	X	X		Property Protection Natural Resource Protection
Action 2. Beetle-killed Tree Removal	New Action	X	X		Property Protection Natural Resource Protection
Action 3. Climate Action Plan	New Action	X	X	X	Prevention
Action 4. Climate-smart Agricultural Planning	New Action	X	X		Prevention Property Protection Natural Resource Protection
Action 5. Update and Implement Community Wildfire Protection Plan	New Action	X	X		Prevention Property Protection Natural Resource Protection
Action 6. Colusa County Fire Mitigation Plan of 2024 Implementation	New Action	X	X		Prevention Property Protection Natural Resource Protection
Action 7. Colusa County Fire Safe Council	New Action	X	X		Prevention Property Protection Natural Resource Protection
Action 8. Groundwater Recharge	New Action	X	X		Property Protection Natural Resource Protection
Action 9. Invasive Species Removal from Waterways	New Action	X	X	X	Property Protection Natural Resource Protection
Action 10. Irrigation Efficiency Technical Assistance	New Action	X	X		Property Protection Natural Resource Protection
Action 11. Localized Stormwater Management and Streambank Erosion Mitigation	New Action	X	X	X	Property Protection Natural Resource Protection
Action 12. On-farm Water Storage Projects	New Action	X	X		Property Protection Natural Resource Protection
Cortina Community Services District					
Action 1. Armor the Salt Creek Bank	New Action	X	X	X	Property Protection Natural Resource Protection
Kletsel Dehe Wintun Nation					
Action 1. Update Cortina Rancheria Climate Change Adaptation Plan (2017)	New Action	X	X	X	Prevention

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 2. Water Tank	New Action	X	X		Property Protection Structural Project
Action 3. Emergency Generator	New Action	X	X		Emergency Services Property Protection
Action 4. Improve Erosion Control Management Practices	New Action	X	X	X	Property Protection Natural Resource Protection
Action 5. Secondary Evacuation Route	New Action	X	X		Emergency Services
Action 6. Fuel Reduction and Defensible Space Projects	New Action	X	X		Property Protection Natural Resource Protection
Action 7. Enhanced Mapping and Assessing Rancheria Vulnerability to Hazards	New Action	X	X		Prevention Emergency Services Property Protection
Action 8. Public Education and Outreach	New Action	X	X	X	Public Information
RD 108					
Action 1. Emergency Generator Maintenance and Upkeep - District Office	Previous Action	X	X	X	Emergency Services Property Protection
Action 2. Emergency Generator - Pump Stations	Previous Action	X	X	X	Emergency Services Property Protection
Action 3. Stabilization of Colusa Basin Drain Levee	Previous Action	X	X	X	Property Protection Structural Projects
RD 479					
Action 1. RD 479 Integrity Preservation	New Action	X	X	X	Property Protection Structural Projects
Sacramento Westside Levee District					
Action 1. Seepage Mitigation of Sacramento River Levee	Previous Action	X	X	X	Property Protection Structural Projects
Action 2. Hardening of Sacramento River Levee	Previous Action	X	X	X	Property Protection Structural Projects
Action 3. BRIC Project EMF-2021- BR-089-0008: Grimes Floodplain Restoration and Levee Resiliency Project	New Action	X	X	X	Property Protection Structural Projects

Colusa County Mitigation Actions

Multi-Hazard Actions

Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (Assembly Bill (AB) 2140).

Project Description: Specifically, this section requires that each applicable jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

Other Alternatives: No action

Existing Planning Mechanisms through which Action will be Implemented: Safety Element of General Plan

Responsible Office/Partners: Colusa County Planning Department

Cost Estimate: Jurisdictional board/staff time

Benefits (avoided Losses): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

Potential Funding: Local budgets

Timeline: As soon as possible.

Project Priority: High

Action 2. Public Education and Community Outreach Countywide

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Families unprepared in an event of a disaster

Project Description: Provide educational materials in multi-languages; participate in public events throughout the county, engage in conversation explaining the importance of emergency preparedness for all hazards. Place materials at various locations in the county example libraries, community bulletin boards and schools.

Other Alternatives: Use social media platforms

Existing Planning Mechanism(s) through which Action Will Be Implemented: Through the OES, Schools, Public Health and Cities

Responsible Office/Partners: County OES

Benefits (Losses Avoided): If people can be prepared for all-hazard events, the losses are numerous and not limited to financial assistance.

Potential Funding: General Fund, Grants to be identified

Timeline: 2027

Project Priority (H, M, L): High

Action 3. Alert and Warning System for Sheriff's Office and Public Health

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 2, 3, 4,5

Issue/Background: Residents currently receive alerts in similar formats. Access to several Alerting and Warning Systems is available. The system requires residents to register to receive notifications.

Project Description: Receive approval from FEMA to use IPAWS. Will allow for anyone with a smart phone to receive notification in the event of a Multi-Hazard.

Other Alternatives: Continue to use RAVE system

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate implementation through the EAP, work alongside Public Health using RAVE system to send out notifications. Community outreach to register more residents.

Responsible Office/Partners: County OES & Public Health

Benefits (Losses Avoided): Life and property preservation

Potential Funding: Public Health will continue to fund RAVE system, no charge for IPAWS

Timeline: 2025

Project Priority (H, M, L): Medium

Action 4. Technology Enhancements to Support Hazard Mitigation Planning and Project Implementation and for use in Disaster Preparedness, Response, and Recovery Efforts (e.g., GIS Application Enhancements)

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: Colusa County requires a high-impact response and recovery plan with the right resources in the right place at the right time due to its geography. Cities within the county are separated by miles with limited to no infrastructure in between. GIS can forecast surge and optimize resource allocation so that we can place resources precisely where they are most needed. Mapping and analysis can expose gaps in capacity, show at-risk populations' needs, aid in effectively distributing supplies, and inform personnel allocation. Location intelligence supports the distribution of resources where people and need intersect.

Project Description: Geographic information Software will serve as the common denominator for Colusa County DHHS preparedness solution because location data is essential to every phase of planning, response, and recovery. GIS scales to events ranging from inclement weather conditions to pandemics. It helps state and local governments scope out the extent of a public health crisis and predict the path forward for allocating resources and monitoring processes and outcomes. Maps and apps enable public health officials to coordinate efforts with other agencies and external stakeholders. The public health preparedness community can make major inroads by embracing GIS data, models, communication and engagement hubs, and location-centric applications.

Other Alternatives: There are no Other Alternatives

Existing Planning Mechanism(s) through which Action Will Be Implemented: This plan will be implemented through our ArcGIS Organizational Account.

Responsible Office/Partners: Department of Health and Human Services

Benefits (Losses Avoided): Using Esri Software for Health and Human services professionals to provide insights, Spatial data and geographic information system (GIS) technology to underscore coverage gaps in the populations we hope to reach, to create opportunities to improve workflows, and the ability to plan for and mitigate against unforeseen events.

Potential Funding: Behavioral Health Bridge Housing Program Round 3

Timeline: November 2024- March 2025

Project Priority (H, M, L): H

Action 5. Vulnerable Population Planning

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5,

Issue/Background: During disasters, people with higher needs for care require specialized sheltering options. This may include shelter similar to skilled nursing or psychiatric care hospitals, identifying the County's need and resources. During the 2018 Camp Fire Colusa assisted Butte county by providing sheltering for vulnerable populations in the Williams Migrant Center.

Project Description: Development of a shelter plan focused on vulnerable populations, this may include the use of Williams Migrant Center, Local Motels and Hotels or an MOU with a neighboring county to assist in sheltering vulnerable populations.

Other Alternatives: Formalize MOUS with neighboring County to provide care for our vulnerable populations.

Existing Planning Mechanism(s) through which Action Will Be Implemented: There is an existing reoccurring multidisciplinary meeting in which partner organizations meet to discuss the safety and well-being of vulnerable county residents as well as high intensity users of services.

Responsible Office/Partners: Public Health, Fire, Police, Sheriff, Behavioral Health, Red Cross, APS/CPS Units

Benefits (Losses Avoided): Avoid exacerbation of existing conditions due to complications related to vulnerable populations. The mitigation of specialized need reduces the strain placed on EMS services and first responders that are responding to primary incidents.

Potential Funding: FEMA disaster funding: HMGP, HHAP Funds,

Timeline: Within 5 years

Project Priority (H, M, L): M

Action 6. *Update 211 system*

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire).

Goals Addressed: 1, 3, 4, 5

Issue/Background: During disaster, emergency lines such as 911 becomes inundated with non-emergent calls. Having a resource center that can receive all non-emergent calls and coordinate with local response team will allow public to have access to information in real time without interfering with other operations.

Project Description: Work to develop a contract with a 211-call center to provide services within Colusa County. By establishing, a year round 211 program and outlining the level of response during emergencies this would establish the infrastructure to assist in any future disaster.

Other Alternatives: OES call center for non-emergent issues during disasters.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Colusa 211 was one of the Counties the received Disaster 211 through SB1212, that program is no longer active, however much of the infrastructure work necessary to launching 211 has already been conducted in the County. Colusa 211 meetings have been ongoing over the last 6 months between identified partners.

Responsible Office/Partners: OES, Sheriff, DHHS, County CAO, 211 Call Center, CPUC

Benefits (Losses Avoided): Reducing the strain placed on first responders that are dealing with primary incidents, centralized information database for public to access. Uniform message developed by OES and shared county wide during disaster response

Potential Funding: Jobs First Colusa, Northern Valley Community Foundation,

Timeline: 6-12 months

Project Priority (H, M, L): M

Action 7. *Coordinate with the American Red Cross (ARC) for Mass Care Planning*

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5

Issue/Background: Any time there is an evacuation of the local population, mass care and sheltering will be a responsibility of the County. This is Emergency Support Function 6, which is a responsibility of Human Services, along with medical care of sheltered populations, which is the responsibility of Public Health, Emergency Support Function 8. Current plans are in need of updates, the trailer that houses ARC shelter supplies has extensive water damage, and staff need to be exercised on shelter operations with ARC.

Project Description: This mitigation project will coordinate meetings between DHHS, OES and ARC. Shelter plans will be updated, a new trailer will be purchased, and an exercise will be held to test the capabilities of staff.

Other Alternatives: Online training

Existing Planning Mechanism(s) through which Action Will Be Implemented: American Red Cross participates in emergency preparedness and planning meetings already occurring within Colusa County. ARC has provided training to DHHS staff in FY 23-24.

Responsible Office/Partners: DHHS, ARC

Benefits (Losses Avoided): Improved mass care services will lead to improved outcomes for community members evacuated due to an emergency or disaster.

Potential Funding: General Fund, Staff Time

Timeline: July 1, 2026

Project Priority (H, M, L): M

Action 8. *Vulnerable Population Planning (with a focus on Access and Functional Needs)*

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5

Issue/Background: Vulnerable populations are disproportionately affected by emergencies and disasters than the rest of the population. This occurs for various reasons depending on the hazard and the individual. Colusa County has a history of being underserved in regards to services available and community based organizations.

Project Description: This project will coordinate with various AFN services providers and independent living center organizations to increase capacity and subject matter expertise. It will also facilitate an AFN

disaster work group. This work group would support county efforts to support vulnerable populations during disasters.

Other Alternatives: Set-up subcommittee from an already active work group in the county.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Utilize Colusa County Partners for Health, Healthcare Coalition and Emergency Medical Care Committee to make connections with service providers.

Responsible Office/Partners: DHHS

Benefits (Losses Avoided): Improved community resilience to disasters. Enhanced County coordination and response specific to vulnerable populations during an emergency or disaster.

Potential Funding: CASPHI

Timeline: July 1, 2026

Project Priority (H, M, L): M

Action 9. Coordination with Community Based Organizations

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5

Issue/Background: In efforts to provide assistance to community during a disaster there should be a strong relationship with the public as a government agency.

Project Description: Build relationship with Community Based Organizations (CBO's) in the county. Create a list of CBO's POC information, organization's focus areas, geographic location, resources available. Engage in communication during major events.

Other Alternatives: Continue to reach out to DHHS

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate implementation through the EAP

Responsible Office/Partners: OES; DHHS

Benefits (Losses Avoided): Provide community in a time of devastation with assistance

Potential Funding: Staff Time

Timeline: 2025

Project Priority (H, M, L): Medium

Action 10. Enhance Tribal Coordination for Disasters

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5

Issue/Background: Currently unaware of any communication between county and tribes in the event of a disaster. Tribes may have their own plan for evacuations.

Project Description: Coordination with Tribes during events and/or pre-season fire & winter. There may be major damages within Tribes' jurisdiction during a disaster, which county may be unaware of such. Share with tribes updates and invite input throughout planning processes for Multi-Hazard events.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented:

Responsible Office/Partners: OES

Benefits (Losses Avoided): Life preservation

Potential Funding: Staff Time

Timeline: 2026

Project Priority (H, M, L): Low

Action 11. Generator Purchases to Enhance Project Power for Colusa County

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: Colusa County's Project Power comprises a reserve of generators that can be utilized throughout the entire county during power outages as part of emergency response measures.

Project Description: Acquire and uphold generators to enhance the current Project Power. Generators can be utilized for individuals relying on life-support systems or to guarantee the uninterrupted operation of businesses or government entities

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate implementation through EAP

Responsible Office/Partners: County OES

Benefits (Losses Avoided): Life and property preservation

Potential Funding: Homeland Security Grant Funds

Timeline: 2027

Project Priority (H, M, L): Low

Action 12. EOP Update & Implementation

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: EOP is out dated; new implementations from Cal-OES have been establish

Project Description: Review and identify sections, which need be update in County EOP. Expect to work with consultant in updating EOP.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented:

Responsible Office/Partners: County OES

Benefits (Losses Avoided): Life preservation

Potential Funding: Emergency Management Program Grant

Timeline: 2026

Project Priority (H, M, L): Low

Action 13. *Evacuation Planning Countywide*

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Clear travel routes are available, yet numerous individuals struggle with understanding how to evacuate from their present location and locate suitable travel routes.

Project Description: Each town in the county will have detailed plans outlining evacuation procedures and travel routes.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate implementation through the EAP

Responsible Office/Partners: OES; County Public Works; CalTrans; CHP

Benefits (Losses Avoided): Life preservation

Potential Funding: Emergency Management Program Grant; FEMA HMGP

Timeline: 2026

Project Priority (H, M, L): Low

Action 14. *Migrant Center Improvements/House Vulnerable Populations During Disaster*

Hazards Addressed: Multi-hazard (Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds), Climate Change, Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Landslide, Mudslide, and Debris Flow, Levee Failure, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning), Severe Weather: High Winds and Tornados, Stream Bank Erosion, Subsidence, Wildfire)

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: The County operates a 100-unit Migrant Farm Housing. These units were intended to be used during the summer months by migrant farm workers. Due to their seasonal use, the units were not built with heating. They only had evaporative cooling to each unit. This prevented them from being used for habitation in the winter months.

Project Description: In 2022, the BOS entered into an agreement with HCD-OMS to provide improvements to the aging Migrant Center. These improvements included Central Heating and Air to all 100 units. This allowed them to be used in the winter months for emergency housing situations. They need to be maintained year-round.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: HCD-OMS agreement.

Responsible Office/Partners: Agreement between property owner and operator (Colusa County) and the CA HCD-OMS building owner and funding authority for the Migrant Center Program.

Benefits (Losses Avoided): Provides housing for vulnerable populations during emergency situations.

Potential Funding: HCD-OMS funding for capital improvement and infrastructure to their buildings.

Timeline: Continual maintenance

Project Priority (H, M, L): Low

Action 15. Install Road Closure Infrastructure

Hazards Addressed: Multi-Hazard

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: During winter time flooding conditions, wildfire events or other hazardous events, closing roads provides a way to prevent drivers from going through impassable standing water or other hazards. Currently the County uses portable barricades to close these roads which are labor intensive to place county wide and people drive around them.

Project Description: This project would install permanent signage that can easily be turned in the direction of traffic during hazard events.

Other Alternatives: More expensive, permanent Changeable message boards.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Determine all routes which will need the installation of these, develop cost estimates, find funding, perform environmental work, bid project, award and construct.

Responsible Office/Partners: Colusa County Public Works

Benefits (Losses Avoided): The use of these will potentially save lives and avoid costs and risks to emergency personnel who perform rescues of people who drive around barricades or otherwise drive into hazardous situations.

Potential Funding: Hazard Elimination grants.

Timeline: Within 5 years (if funding is available)

Project Priority (H, M, L): M

Agricultural Hazards: Severe Weather/Invasive Species (Pests and Weeds)

Action 16. Pest and Rodent Prevention Project for Infrastructure Protection

Hazards Addressed: Agricultural hazards.

Goals Addressed: 1, 3, 6

Issue/Background: The County has critical infrastructure such as interstates, railways, and public roads. Colusa County also has an extensive production agriculture industry. Pests, if not properly managed, can cause not only economic crop damage, but extensive infrastructure damage from burrowing rodents and other such pests.

Project Description: Develop a program to ensure best management practices are used in maintaining the pest populations throughout the County. In addition, find ways to assist the industry in maintaining the pest populations.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: No program exists. This project would create the planning mechanism.

Responsible Office/Partners: Colusa Agricultural Commissioner Office, CCRCD

Benefits (Losses Avoided): Protection of critical infrastructure.

Potential Funding: Existing budgets. Cal Trans grants.

Timeline: Currently in progress

Project Priority (H, M, L): Medium

Action 17. Development of Ordinance and Zoning to Limit/Manage Pest Introduction into Colusa County

Hazards Addressed: Agricultural hazards

Goals Addressed: 1, 3, 6

Issue/Background: Colusa County has an extensive production agriculture industry. Pests are a significant threat to this multi-million-dollar industry. The County must take proactive all proactive steps to protect that industry from pest introduction.

Project Description: Develop rules, policies, and ordinances that will protect Colusa County's Agricultural Industry. Implement programs to ensure their success.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: No program exists. This project would create the planning mechanism.

Responsible Office/Partners: Colusa Agricultural Commissioner Office, CCRCD

Benefits (Losses Avoided): Reduction in greenhouse gasses has a cumulative effect in reducing the effects of climate change worldwide

Potential Funding: Existing budgets.

Timeline: Within 5 years.

Project Priority (H, M, L): Medium

Action 18. Abandoned Agricultural Lands Pest Management (joint with RCD)

Hazards Addressed: Agriculture Hazards

Goals Addressed: 1, 3, 4, 6

Issue/Background: Colusa County has abandoned croplands that pose a threat to nearby productive land. A high number of invertebrate and vertebrate pests that live on unmanaged, abandoned land can cause crop damage to adjacent fields.

Project Description: Orchard removal, mulching to improve soil health, and reestablishing beneficial insect habitat.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Wildlife Conservation Board (WCB), CDFA, Colusa County Wildfire Mitigation Action Plan (2024)

Responsible Office/Partners: CCRCD, Colusa Agricultural Commissioner Office

Benefits (Losses Avoided): Pest management, crop damage mitigation

Potential Funding: CDFA, WCB

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Climate Change Actions

Action 19. *Climate Change Mitigation Adaptation Action Plan*

Hazards Addressed: Climate Change

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Anthropogenic and other greenhouse gasses will continue to cause more extreme climate change conditions unless steps taken to minimize greenhouse gases and carbon footprints. The County's roadways, infrastructure in flood zones, disadvantaged communities, agriculture sector and sensitive species habitat are among the most vulnerable to climate change impacts.

Project Description: Colusa County will be proposing to hire a consultant to coordinate efforts in implementing the Climate Action Plan. Along with conducting Vulnerability Assessments

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES to implement through the LHMP

Responsible Office/Partners: OES; County Safety Officer, Cities of Colusa and Williams

Benefits (Losses Avoided): Reduction in greenhouse gasses has a cumulative effect in reducing the effects of climate change worldwide

Potential Funding: FEMA Hazard Mitigation Grant

Timeline: 2027

Project Priority (H, M, L): High

Action 20. *Climate-smart Agricultural Planning (joint with RCD)*

Hazards Addressed: Climate change, air quality

Goals Addressed: 1, 3, 4, 6

Issue/Background: Climate change threatens the food security and economic viability of agriculture in Colusa County. Drought, flood, and severe weather are all poised to intensify as climate change continues to impact California. Agricultural practices need updating to become resilient and can be part of the solution to climate change in our region.

Project Description: CCRCD will incorporate conservation agriculture practices to conserve resources and limit the exacerbation of climate change, while also reaching farmers to aid in climate change adaptation and resiliency on farms.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Regional Climate and Agriculture Hub, CDFA programming

Responsible Office/Partners: CCRCD, USDA-NRCS

Benefits (Losses Avoided): Climate change adaptation and resiliency, carbon sequestration, mitigation of greenhouse gas emissions

Potential Funding: State ag grants, USDA grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Dam Failure Actions

Action 21. Continue Communication about Dam Safety and Awareness County-wide

Hazards Addressed: Dam failure

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: The County OES attends yearly dam training, receives and maintains copies of all dams that would affect Colusa County. While verbalizing this to our counterparts in the county and city is done, it would be beneficial for all to have an in-person awareness meeting.

Project Description: Call meeting of county and city administration and first responders

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate meetings

Responsible Office/Partners: County OES

Benefits (Losses Avoided): Life and property preservation

Potential Funding: Staff Time

Timeline: 2027

Project Priority (H, M, L): High-easily achievable

Action 22. Dam Failure Mitigation, Education, and Awareness

Hazards Addressed: Dam Failure

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Sites Reservoir dam construction anticipated late 2026, currently have no plan in place for dam failure. There are other dams near the county and residents are not fully educated or aware of imminent threat of a dam failure

Project Description: The plan will address the potential threat of a dam failure, not only for the Sites Reservoir, but also for any dams surrounding the area.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES will coordinate implementation through the EAP

Responsible Office/Partners: OES, Public Works

Benefits (Losses Avoided): Life preservation

Potential Funding: Emergency Management Program Grant, FEMA HMGP

Timeline: 2028

Project Priority (H, M, L): Medium

Drought and Water Shortage Actions

Action 23. Groundwater Recharge (joint with RCD)

Hazards Addressed: Drought and water shortage, agriculture, subsidence

Goals Addressed: 1, 3, 4, 6

Issue/Background: Climate instability has led to increased extreme precipitation events. Due to the prevalence of extreme precipitation events and drought, it may prove beneficial to harness the surface runoff in wet years by recharging the aquifer.

Project Description: CCRCD will support farmers and landowners interested in installing groundwater recharge projects on their land.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: DWR Programming, USDA-NRCS Conservation Innovation, CDFA

Responsible Office/Partners: Colusa County, CCRCD, DWR, USDA-NRCS Conservation Innovation, CDFA, various NGOs

Benefits (Losses Avoided): Food security, long-term water storage for dry years, aquifer recharge/maintenance

Potential Funding: CA DWR, CDFA, USDA grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 24. Invasive Species Removal from Waterways (joint with RCD)

Hazards Addressed: Drought and water storage, agriculture

Goals Addressed: 1, 3, 4, 6

Issue/Background: California Invasive Plant Council (Cal IPC) mapped arundo and tamarisk throughout Colusa County watersheds and identified these species as an invasive species due to being high water demand plants, spreading vigorously, displacing native species and a fire hazard.

Project Description: CCRCD will work with a neighboring RCD and the Colusa Agriculture Department to continue removing arundo in upper Stony Creek and other water ways throughout the county.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Cal IPC report, Glenn County and Colusa County Community Wildfire Protection Plans

Responsible Office/Partners: Colusa County Dept of Agriculture, CCRCD, Glenn County RCD

Benefits (Losses Avoided): Invasive plant control, water security, streambank stability, wildfire protection

Potential Funding: Cal Fire, CDFA

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 25. Irrigation Efficiency Technical Assistance (joint with RCD)

Hazards Addressed: Drought and water shortage, agriculture

Goals Addressed: 1, 3, 4, 6

Issue/Background: Drought has worsened in the Sacramento Valley and water prices have risen, making agriculture less feasible for farmers in Colusa County and destabilizing our local food system.

Project Description: CCRCD will provide planning and financial assistance to farms to increase water use efficiency on farms. CCRCD will help farmers upgrade water and pumping infrastructure, introduce farmers to climate-smart agriculture, irrigation management, increase uptake of soil health practices, land management technical assistance for water quantity and quality.

Other Alternatives: No action, which may keep water prices higher for longer.

Existing Planning Mechanism(s) through which Action Will Be Implemented: CDFA SWEEP, Regional Mobile Irrigation Lab

Responsible Office/Partners: Colusa County Dept of Agriculture, CCRCD, USDA-NRCS, Yolo RCD, Glenn RCD

Benefits (Losses Avoided): Increased water use efficiency on farmland/farm adaptation to drought, food security, economic benefits for farmers

Potential Funding: CA DWR, CAL FIRE grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 26. On-farm Water Storage Projects (joint with RCD)

Hazards Addressed: Drought and water shortage, agriculture

Goals Addressed: 1, 3, 4, 6

Issue/Background: Drought has worsened in the Sacramento Valley and water prices have risen, making agriculture less feasible for farmers in Colusa County and destabilizing our local food system. Water storage provides a localized way to address this issue and improve the economic viability of farms and ranches.

Project Description: CCRCD will improve or install water storage on farms and ranches in Colusa County based on NRCS conservation practice recommendations. Rangeland planting for upper watershed management may also be included in this project.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: CDFA SWEEP, DWR Programming

Responsible Office/Partners: Colusa County Dept of Agriculture, CCRCD, USDA-NRCS

Benefits (Losses Avoided): Farm adaptation to drought, food security, long-term water storage for dry years, economic benefit for farmers, habitat establishment in upper watershed

Potential Funding: CDFA, CA DWR grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Earthquake Actions

Action 27. *Earthquake Vulnerability Study and Retrofitting of County Structural Assets*

Hazards Addressed: Earthquake

Goals Addressed: 1, 2, 3

Issue/Background: Colusa County has older areas and historic buildings of Unreinforced Masonry (URM), multi-story, and older construction that may be vulnerable to a seismic event. Most of these buildings have not been evaluated for seismic safety or performance during an earthquake.

Project Description:

The County's building official will work with building owners to conduct seismic assessments of potential vulnerable buildings and will identify and prioritize those in need of seismic upgrades. This will involve site visits and coordination with seismic professionals to determine possible seismic retrofit options that also preserve the historic and architectural integrity of vulnerable buildings. Once seismic assessments and prioritizations are complete, the County will develop and implement a prioritized plan for structural upgrades of key buildings.

Location of Project: Countywide

Other Alternatives: Maintain and operate or abandon vulnerable structures

Existing Planning Mechanism(s) through which Action Will Be Implemented: Capital Improvement Program

Responsible Office/Partners: County Building Official

Project Priority: Low

Benefits (Losses Avoided): Life safety, property protection, and historic preservation

Potential Funding: Initial seismic assessment – Capital Improvement Program/County General Fund. Seismic Upgrades – CA Seismic Retrofit Grants under the California Earthquake Authority and FEMA HMGP grants

Timeline: 2025 - 2030

Flood, Localized Flood, Levee Failure, Heavy Rains and Storm, and Stream Bank Erosion Actions

Action 28. *Flood ordinance updates*

Hazards Addressed: Flood, Localized Flood, Heavy Rains and Storms, Levee Failure

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: Flood ordinance changes have increased the number of people in the community that are required to carry flood insurance. The financial cost of flood insurance can significantly affect low-income residents as well as those on fixed incomes, leading to an increase of under insured households. During a levee failure the impact to towns located along the Sacramento River (Colusa, Princeton)

Project Description: Develop a 3-tiered approach to flood response, including immediate funds to help cover cost of deductibles, collective bargaining on affordable flooding insurance providing under insured families short term housing post disaster. Offering multiple insurance options for people in Colusa to make sure they have appropriate coverage will help establish a response plan in the event of floods.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Application for funding is complete and pending submission, once funding is secured there will be a working group formed to help guide the project. Implementation of similar projects are currently underway; Colusa County will collaborate with entities currently performing similar work.

Responsible Office/Partners: Colusa Public Works, DHHS,

Benefits (Losses Avoided): Provides affordable insurance options for people located in flood zones. Increases communities ability to recover in the event in catastrophic flooding.

Potential Funding: State of California, Adaptation Planning Grant Program - Round 2

Timeline: 18 months

Project Priority (H, M, L): H

Action 29. *Localized Stormwater Management and Streambank Erosion Mitigation (joint with RCD)*

Hazards Addressed: Flooding, severe weather, stream bank erosion

Goals Addressed: 1, 3, 4, 5

Issue/Background: Climate instability has led to increased extreme precipitation events. Due to the prevalence of extreme precipitation events, Colusa County needs to adapt natural lands to be more resilient to flooding and waterway erosion.

Project Description: CCRCD will update our streambank erosion plan, update the Colusa Basin Watershed Assessment, restore floodplain/wetland habitat, do rangeland and upper watershed management to mitigate erosion, instream restoration of stream beds, implement conservation practices along streambanks and ditches (grassed waterways, low water crossings)

Other Alternatives: Allow erosion to occur and fix on a case by case basis.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Colusa Basin Watershed Assessment, Streambank Erosion Plan, SGMA Action Plan

Responsible Office/Partners: CCRCD, DWR

Benefits (Losses Avoided): Reduced runoff, reduced soil erosion/loss, increased water quality

Potential Funding: CA DWR grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 30. Princeton Storm Water Drainage Assessment

Hazards Addressed: Flooding

Goals Addressed: 1, 3, 4, 5

Issue/Background: During heavy or long duration rain events, standing and ponding water are experienced in residential areas within the town of Princeton.

Project Description: This project would assess drainage within the town and determine capacity necessary for improvements to the drainage system. In addition a pump could be purchased if funding were available to remove water from inundated areas.

Other Alternatives: N/A

Existing Planning Mechanism(s) through which Action Will Be Implemented: At this time, County Public Work staff will continue to try to alleviate the issues associated with these events by clearing drains, placing flooded signs and monitoring the situations to make sure the area is as safe and passable as possible.

Responsible Office/Partners: County Public Works, OES

Benefits (Losses Avoided): Life/Safety, Damage to roads due to saturated roadway section

Potential Funding: Transportation funds

Timeline: When Funding becomes available

Project Priority (H, M, L): M

Action 31. Roadway Flood Prevention

Hazards Addressed: Flooding

Goals Addressed: 1, 3, 4, 5, 6

Issue/Background: The County has many roads which flood during heavy rain events, due to large tributary areas contributing to local water sheds.

Project Description: This project would include many different improvements which could include increasing and adding drainage culverts, roadside grading and adding drainage facilities, elevating roadways where feasible in low spots as well as other innovative solutions not yet explored. These roads include, but are not limited to, Corbin Road, East Clay Street, Lonestar Road, San Jose Road, Wildwood Road, State Route 20 in working with Caltrans.

Other Alternatives: Full elevation of the roadway into a causeway fashion.

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES would coordinate implementation with Public Works.

Responsible Office/Partners: Colusa County Public Works, Caltrans, DWR

Benefits (Losses Avoided): Preservation of Life and safety.

Potential Funding: State and Federal road and or flood funding.

Timeline: 2030

Project Priority (H, M, L): Low

Severe Weather (Extreme Cold, Extreme Heat, Heavy Rains and Storms, Wind and Tornado) Actions

Action 32. Sheltering for Unhoused (Winter Weather)

Hazards Addressed: Risk of weather related medical emergencies for people experiencing homelessness.

Goals Addressed: 1, 3, 4

Issue/Background: Colusa County has extreme heat in the summer and has experienced severe colds in the winter along with heavy rain. Colusa County does not have a year-round shelter for unhoused people.

Project Description: Wintertime Sheltering- Working in collaboration with Ag Dept. and Office of Migrant Services, DHHS will operate a wintertime shelter for families between the months of December and March. In doing so the risk of people in harsh winter climates will be reduced and the housing team will work to help secure permanent housing.

Other Alternatives: Temporary sheltering utilizing motel vouchers.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Colusa County DHHS successfully operated a pilot project of the Wintertime Shelter during 2023/2024.

Responsible Office/Partners: Colusa County Health and Human Services, Public Health, Ag. Dept. and Office of Migrant Services (OMS).

Benefits (Losses Avoided): Decrease the number of people accessing emergency medical services due to the winter weather.

Potential Funding: Homeless Housing, Assistance and Prevention (HHAP) Grant Program (Winter Shelter)

Timeline: November 2024- March 2025

Project Priority (H, M, L): H

Action 33. Sheltering for Unhoused (Extreme Heat)

Hazards Addressed: Risk of weather-related medical emergencies for people experiencing homelessness. (Extreme Heat)

Goals Addressed: 1, 3, 4

Issue/Background: Colusa County has extreme heat in the summer and has experienced severe colds in the winter along with heavy rain. Colusa County does not have a year round shelter for unhoused people.

Project Description: Housing case managers within the DHHS Housing unit will work with vulnerable populations to secure short term stays in hotel/motel when temperatures exceed 100 degrees.

Other Alternatives: Cooling Centers on days over 100 degrees.

Existing Planning Mechanism(s) through which Action Will Be Implemented:

Colusa County Public Health has operated cooling shelters utilizing public library offices.

Responsible Office/Partners: Colusa County Health and Human Services, Public Health, Colusa Library, Local motels

Benefits (Losses Avoided): Decrease the number of people accessing emergency medical services due to the extreme heat.

Potential Funding: Rural Set Aside special NOFO

Timeline: Summer 2024

Project Priority (H, M, L): H

Action 34. Severe Weather Plan Update

Hazards Addressed: Severe Weather

Goals Addressed: 1, 2, 3, 4, 5, 6

Issue/Background: Severe weather during Winter Storms and Extreme heat in the summer is becoming more prevalent and increasing risk to people and property.

Project Description: Heat Contingency Planning, PSPS Planning. Evaluate which resources are available to protect livestock and animals from extreme cold and/or heat. Educate the public on disaster preparedness

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: OES to continue community outreach providing printed information related to extreme weather

Responsible Office/Partners: OES, County Agency's

Benefits (Losses Avoided): Protection of life and property

Potential Funding: HMGP, EMPG

Timeline: 2026

Project Priority (H, M, L): Medium

Wildfire Actions

Action 35. *Beetle-killed Tree Removal (joint with RCD)*

Hazards Addressed: Wildfire, Drought and Water Shortage, Climate Change, Ag Hazards

Goals Addressed: 1, 3, 4, 6

Issue/Background: Colusa County has a high number of bark-beetle infested trees that are now dead and require removal to minimize fire risk. Beetle populations increase over time and threaten infestation of healthy nearby trees.

Project Description: CCRCD will work with US Forest Service and local landowners to remove beetle infested trees.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Colusa County Community Wildfire Protection Plans, Colusa County Fire Mitigation Project (2024)

Responsible Office/Partners: Colusa County, CCRCD, US Forest Service

Benefits (Losses Avoided): Pest management, wildfire protection

Potential Funding: Cal Fire

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 36. *Update and Implement Community Wildfire Protection Plan (joint with RCD)*

Hazards Addressed: Fire mitigation

Goals Addressed: 1, 3, 4, 6

Issue/Background: Wildfire threatens the hills of Western Colusa County and poses a risk to structures and valuable natural resources in the area. CCRCD has been forming a Community Wildfire Protection Plan to gain stakeholder input and develop a collective understanding of the risks and solutions associated with wildfire in the region.

Project Description: CCRCD will update the CWPP and work to implement project ideas in the county.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: CWPP development, Fire Safe Council, Colusa County Coordinator Fire Mitigation Plan (2024)

Responsible Office/Partners: County of Colusa Community Development, CCRCDD, Cal Fire, local fire authorities

Benefits (Losses Avoided): Decreased wildfire risk, high community input on climate solutions, conservation of natural resources (timber and natural lands)

Potential Funding: CAL FIRE grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 37. Colusa County Fire Mitigation Plan of 2024 Implementation (joint with RCD)

Hazards Addressed: Fire mitigation

Goals Addressed: 1, 3, 4,6

Issue/Background: Wildfire threatens the hills of Western Colusa County and poses a risk to structures and valuable natural resources in the area.

Project Description: CCRCDD will implement projects outlined in the fire mitigation plan. This plan identifies new projects to be added to the community wildfire protection plan (CWPP) and reestablishes stakeholder engagement that began with the CWPP. New projects have been prioritized and identified through this effort between CCRCDD and the County of Colusa Community Development Department. Projects include fuel breaks, prescribed burning on private lands, and community programs to increase defensible space in neighborhoods.

Other Alternatives: Deal with fires after the start.

Existing Planning Mechanism(s) through which Action Will Be Implemented: CWPP, Fire Safe Council, Colusa County Coordinator Fire Mitigation Plan (2024)

Responsible Office/Partners: County of Colusa Community Development, CCRCDD, Cal Fire, local fire authorities, US Forest Service

Benefits (Losses Avoided): Decreased wildfire risk, community input on climate solutions, conservation of natural resources

Potential Funding: CAL FIRE grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High

Action 38. Colusa County Fire Safe Council (joint with RCD)

Hazards Addressed: Fire mitigation

Goals Addressed: 1, 3, 4, 6

Issue/Background: Wildfire threatens the hills of Western Colusa County and poses a risk to structures and valuable natural resources in the area.

Project Description: CCRCD will support the development and oversight of a Fire Safe Council, which is a group of stakeholders that meet regularly to prioritize and implement projects outlined in wildfire mitigation plans.

Other Alternatives: Status quo.

Existing Planning Mechanism(s) through which Action Will Be Implemented: CWPP, Fire Safe Council, Colusa County Coordinator Fire Mitigation Plan (2024)

Responsible Office/Partners: County of Colusa Community Development, CCRCD, Cal Fire, local fire authorities, US Forest Service

Benefits (Losses Avoided): Decreased wildfire risk, high community input on climate solutions, conservation of natural resources

Potential Funding: CAL FIRE grants.

Timeline: 2025 – 2030

Project Priority (H, M, L): High