

**ANNUAL REPORT**  
**on the**  
**MITIGATION ACTIONS**  
**in the**  
**SACRAMENTO COUNTY**  
**LOCAL HAZARD MITIGATION PLAN**  
**Dated December 2016**  
**(AND FLOODPLAIN MANAGEMENT PLAN)**

**Adopted County Board of Supervisors on July 11, 2017, Resolution 2017-0502  
and the Plan was approved by FEMA August 18, 2017**

**Contact:**  
**George Booth (916)874-6484**  
**County of Sacramento**  
**Department of Water Resources**

**July 2021**

**The Local Hazard Mitigation Plan is posted at [www.stormready.org](http://www.stormready.org)**

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## OVERVIEW

Federal law requires every city and county to have a plan describing the various natural hazards that might impose a risk to life and property. The plans are prepared with public volunteers and staff who consider ways to mitigate the associated risk. The FEMA Community Rating System requires this annual report.

The County of Sacramento developed the initial Hazard Mitigation Plan in 2005. The plans are effective for five-years. The 2016 plan is the second update. The plans are prepared and updated pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390 and 44 CFR §201.6). The 2016 Local Hazard Mitigation Plan is posted on the Internet at [www.stormready.org](http://www.stormready.org).

A public planning committee, as established pursuant to Board of Supervisors Resolution 2016-0091, February 9, 2016, collaborated to prepare the Hazard Mitigation Plan. The Local Hazard Mitigation Plan, dated December 2016 was adopted on July 11, 2017 by the Board of Supervisors (Resolution 2017-0502) and the Sacramento County Water Agency (Resolution WA-2959). The plan was approved by FEMA on June 12, 2017 and is valid for the subsequent five years.

Annually, a report is prepared and presented to the public describing progress on the hazard mitigation measures in the plan, as required by the FEMA National Flood Insurance Program Community Rating System Activity 510. This annual report will be posted online under the Local Hazard Mitigation Plan page at [www.stormready.org](http://www.stormready.org).

The 5-year plan allows each participating city, district or agency to prioritize mitigation measures, and to amend actions on the activities. The next update to the Hazard Mitigation Plan began in late 2020 and will finish the end of 2021 at which time mitigation activities are added or deleted.

## PLAN PARTICIPANTS

The Sacramento County Local Hazard Mitigation Plan (LHMP) is a multi-jurisdictional plan that geographically covers the entire area within Sacramento County's jurisdictional boundaries (hereinafter referred to as the planning area). Numerous members of the public participated in the planning effort. Twenty-nine participating cities and districts adopted the 2016 Local Hazard Mitigation Plan.

1. Sacramento County
2. Sacramento County Water Agency

3. Sacramento Area Sewer District
4. Sacramento Metro Fire District
5. Sacramento Regional County Sanitation District
6. City of Citrus Heights
7. City of Elk Grove
8. City of Folsom
9. City of Galt
10. City of Isleton
11. City of Rancho Cordova
12. City of Sacramento
13. Southgate Recreation and Park District
14. Twin Rivers School District
15. Los Rios Community College District
16. Cosumnes Community Services District Fire Department
17. Grand Island RD 3
18. Sherman Island RD 341
19. Libby McNeil RD369
20. Pierson District RD551
21. Walnut Grove east RD554
22. Upper Andrus Island RD556
23. Tyler Island RD563
24. Cosumnes River RD800
25. Natomas RD1000
26. Glanville Tract RD1002
27. Twitchell Island RD1601
28. Dead Horse Island RD2111
29. Brannan Andrus Levee Maintenance District (RD 317, 407, 2067)

## HAZARD MITIGATION PLANNING

Hazard mitigation planning is focused on natural hazards to which Sacramento County might be subjected. The federal Disaster Mitigation Act of 2000 seeks to encourage communities to understand hazards and to reduce risk. The first Sacramento County Local Hazard Mitigation Plan was dated December 2004. The Disaster Mitigation Act requires periodic updates to the local hazard mitigation plan to maintain eligibility for pre-disaster mitigation grant funds and some post-disaster public assistance through FEMA. The first update was dated 2011, and the current Plan is dated December 2016.

The planning includes community outreach and discussion about natural hazards, risk, and mitigation activities.

The complete Sacramento County Local Hazard Mitigation Plan is posted at [www.stormready.org](http://www.stormready.org).

The 2016 LHMP was an inclusive effort inviting participation from the public, all seven cities within Sacramento County many agencies and districts. **Exhibit A** is a final notice from FEMA listing all of the jurisdictions who adopted the plan.

As a requirement of the Disaster Mitigation Act (Stafford Act) and the FEMA Community Rating System, this annual report highlights the progress made in the implementation of the mitigation goals and strategies outlined in Sections 5 of the plan.

## HELPFUL DEFINITIONS

**Community Rating System (CRS)** -The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three main goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood hazards and flood insurance.

**County**, as used herein, is the unincorporated Sacramento County.

**FEMA** is the Federal Emergency Management Agency

**Floodplain** is an area mapped or otherwise determined as being subject to inundation by ponding or flowing water in a storm event that has a statistical probability equal to or greater than 1% per year (also known as the 100-year floodplain). Other floodplains include 0.5% per year (200-year) and 0.2% per year (500-year).

**Floodplain Administrator** is the Director of the Sacramento County Department of Water Resources.

**Floodplain Manager** is designated by the Floodplain Administrator.

**Repetitive Loss Area** has one or more structures having experienced two or more floods in a ten-year period, with flood claims exceeding \$1,000 in each instance.

## COMMUNITY RATING SYSTEM

The County is a member in good standing with the FEMA National Flood Insurance Program Community Rating System (CRS), administered by Insurance Services Office, since 1992. Participation in CRS is voluntary. Of the 22,000 communities participating in the National Flood Insurance Program, nationwide, there are 1444 participating in the Community Rating System. CRS is a reward-based program to encourage communities to do a better job of managing floodplains and informing the public of flood hazard risk and mitigation measures.

Due to the County's CRS Class 2 rating, owners of structures in FEMA special flood hazard area receive up to a 40% discount on flood insurance premiums, saving hundreds of dollars on flood insurance premiums is significant to households. This totals more than \$1 million in annual savings to our constituents.

It is estimated that Water Resources spends \$70,000, on average each year, doing CRS record keeping. The CRS program is a system of measurements reviewed every three years and affirmed annually, including:

- Elevation certificates (used to accurately describe the flood risk on a structure by structure basis)
- Map information (keeping flood hazard information and making it available to the public)
- Outreach projects (regular flood hazard and mitigation reminders to the public)
- Hazard disclosure (helping real estate professionals, buyers, and sellers to recognize the flood hazards)
- Flood protection information (provide mitigation and safety information to the public)
- Additional flood data (improving upon the FEMA regulatory maps)
- Open space preservation (the County zoning maintains the expansive south county floodplain as predominately agricultural land use)
- Higher regulatory standards (credits standards such as requiring buildings to be safely above flood hazards 'freeboard')
- Flood data management (recognition of long-standing effort to map high water and local flood hazards)

- Storm water management (credit for applying local, state, and federal storm water pollution reduction requirements)
- Repetitive loss (annual outreach stressing flood insurance and mitigation measures to those who have flooded multiple times)
- Floodplain management planning (credit for annually updating and publishing this report)
- Acquisition and relocation (recognizes efforts to mitigate the most flood-prone structures)
- Flood protection (recognizes efforts to mitigate flood hazard on a property by property basis)
- Drainage system maintenance (reviews ongoing efforts to maintain and improve the storm drainage systems)
- Flood warning program (this is an area where the County can obtain more credit in the future)

\*Reference CRS <https://www.fema.gov> search Community Rating System  
The complete CRS Manual is available at [www.crsresources.org](http://www.crsresources.org)

## ANNUAL REPORT REQUIREMENTS

This Annual Report includes:

- A description of how the evaluation report was prepared and how it is submitted to the governing body, released to the media, and made available to the public;
- How the reader can obtain a copy of the Countywide Natural Disaster Mitigation Plan;
- A review of each recommendation or action item in the action plan or area analysis report, including a statement on how much was accomplished during the previous year;
- A discussion of why any objectives were not reached or why implementation is behind schedule; and
- Revisions to existing recommendations or proposed new ones.

## OUTREACH ACTIVITIES

The Local Hazard Mitigation Plan is a public document, prepared with public input, thus:

- This report is sent directly to each of the five County Supervisors, who also serve as the Board of Directors of the Sacramento County Water Agency.
- This report is sent to the Water Resources Public Information Officer for preparation of a press release and Internet posting.
- Those who participated in the 2016 planning committee are encouraged to review this report.
- Annually, outreach brochures are inserted in the County utility bills and an additional brochure is direct-mailed to properties in a floodplain. These brochures direct the reader to [www.stormready.org](http://www.stormready.org), where they can find this report, the Hazard Mitigation Plan, and Water Resources contact information.
- Water Resources engages regularly with other agencies, departments, districts, cities, and the public to discuss progress.
- Questions and comments should be directed to George Booth (916)874-6484, [boothg@saccounty.net](mailto:boothg@saccounty.net)
- The Sacramento County Local Hazard Mitigation Plan may be viewed at [www.stormready.org](http://www.stormready.org)

## GENERAL LOCAL FLOODPLAIN MANAGEMENT GOALS

### MITIGATION OF REPETITIVE FLOOD LOSSES

Nationwide, a disproportionate amount of flood insurance claims are from property owners who have flooded multiple times. FEMA encourages communities to take an active interest in mitigating repetitive flood losses. Sacramento County has 30 repetitive flood loss areas described in Appendix G of the Local Hazard Mitigation Plan. Various mitigation measures are considered on a case-by-case basis. Water Resources has been assisting owners to mitigate flood risk, such as elevating houses utilizing FEMA grant funding.

CRS requires annual outreach to repetitive loss areas. The letter from the County Department of Water Resources encourages owners of repetitive flood loss properties to contact staff for technical assistance relevant to their specific flood concern. Water Resources engineering staff is always willing to meet with property owners to help them to understand the source of flooding and ways to reduce the risk. Call 3-1-1 to schedule an appointment.

Possible mitigation measures, to reduce flood risk, include:

- Acquisition/demolition – This alternative may be appropriate in areas of egregious flooding, such as flood-prone residential structures within a high velocity floodway.
  - There is a grant application for one acquisition project awaiting approval.
- Elevation – Lifting structures so that the floor is safely above the flood hazard and the foundation is constructed of flood resistant materials in a manner that would resist the hydraulic and hydrostatic forces is an excellent way to mitigate future flood losses. In past years, the Department of Water Resources assisted in the raising of 70 homes, 27 of which were repetitive loss properties.
  - There are pending FEMA grant applications for numerous home elevation projects throughout Sacramento County.
  - It is anticipated that dozens of houses will be elevated in coming years
- Flood-proofing – There are often mitigation measures taken by individual property owners to reduce the risk of flood damage such as walls, berms, sump pumps, overland release routing, and features to seal doorways and other entrances.
- Physical improvements – In some cases, there are things that the property owners can do on-site such as directing shallow floodwater away from a flood-prone structure. In other cases, there are drainage improvement projects that can be constructed by Water Resources staff.

## HELPING PEOPLE UNDERSTAND FLOOD RISK

It is reasonable for every individual, family, neighborhood, and business to take responsibility for their flood safety by understanding the site-specific risk of flooding. Water Resources staff outreaches in many ways hoping the public will seek flood risk reduction advice.

Sources of potential flooding may include:

- Plugged storm drain inlet/pipe
- High intensity storm exceeding the capacity of the piped system
- Power outage or mechanical problem at pump station
- Overwhelmed pump station
- Record storm event
- Flood-prone areas outside of FEMA mapping area

- Sags and areas of ponding
- Roadside ditch
- Channels
- Streams
- Creeks
- Improper site grading
- Canals
- Sloughs
- Floodwall breach
- Levee failure
- Dam failure

On the County website [www.stormready.org](http://www.stormready.org), there is helpful information for property owners and tenants to prepare themselves and their loved ones for winter storms. This website includes real time rain gage and stream gage data, and links to forecast sites.

The Local Hazard Mitigation Plan is not an emergency action plan; instead, it looks to mitigate risk before the hazard occurs. The planning committee was open to considering all viable mitigation measures.

## GOALS OF THE 2016 LOCAL HAZARD MITIGATION PLAN

The 2016 planning committee prepared a mission statement for the mitigation planning effort.

*Mission Statement: This Local Hazard Mitigation Plan assesses natural hazards of concern to the Sacramento community; evaluates risk to life safety, public health, property, and the environment; and evaluates mitigation measures to reduce these risks and vulnerabilities, minimize losses, and increase community resilience.*

Then the planning committee determined the following four main goals in steering the hazard mitigation planning effort:

GOAL 1: Minimize risk and vulnerability of the Sacramento County community to the impacts of natural hazards and protect lives and reduce damages and losses to property, public health, economy, and the environment.

GOAL 2: Improve public outreach, awareness, education, and preparedness for all hazards to minimize hazard related losses

GOAL 3: Improve the capabilities of the community to mitigate losses and to be prepared for, respond to, and recover from a disaster event

GOAL 4: Assure conformance to Federal and State Hazard Mitigation Initiatives and Maximize Potential for Mitigation Implementation

## PROGRESS ON THE MITIGATION ACTION RECOMMENDATIONS

Chapter 5 of the Local Hazard Mitigation Plan describes numerous mitigation actions recommended by the Planning Committee. Table 1 titled 2020 Status of Hazard Mitigation Actions outlines the progress on the proposed actions in unincorporated Sacramento County.

## NEXT PLAN UPDATE

The Local Hazard Mitigation Plan (LHMP), dated December 2016, is effective for five years. The update will begin late 2020 as approved by the Board of Supervisors on July 14, 2020 (Item 37).

The LHMP will be an inclusive process with all seven cities, flood control districts, emergency management, various local government agencies, utilities, and special districts. The meetings will be professionally facilitated and we are expecting much public involvement in the planning process.

Maintaining a current LHMP is a federal requirement if the County is to be eligible for hazard mitigation grants and some post-disaster funding. The planning effort will:

- Identify natural hazards, the communities exposure to those hazards and actions that may mitigate those risks
- Engage the public in a dialogue regarding natural hazards and the potential risk
- Maintain and improve the County's standing in the FEMA Community Rating System
- Provide policy guidance for decision makers

A local hazard mitigation plan should address all natural hazards that could affect the community and describe risk and vulnerability to each hazard. The LHMP will describe the number of existing buildings, infrastructure, and critical facilities located in each participating jurisdiction.

There have been some changes to consider, such as:

- Regional flood control improvements
- Flood risk reduction studies for the delta communities
- Home elevation projects
- Structure acquisition projects

- Land development planning
- California Central Valley Flood Protection Plan
- Changes to statewide hazard mapping
- Capital Region Climate Readiness Collaborative
- Hydrology intensity duration and frequency analyses
- Additions to the repetitive flood loss list
- Floodplain mapping changes

The 2021 LHMP will contain modules with updated hazard mitigation information tailored for those communities who choose to participate in the planning process. Input from the stakeholders and public will be gathered in an open and inclusive manner, with each jurisdiction responsible for inviting its public to participate. The planning process will be structured to meet guidelines of the Disaster Mitigation Act and the Community Rating System.

Everyone is invited to participate in the LHMP planning effort slated for late 2020 and into 2021.

EXHIBIT A FEMA CONFIRMATION

U.S. Department of Homeland Security  
1111 Broadway, Suite 1200  
Oakland, CA. 94607-4052



FEMA

May 1, 2018

George Booth  
Senior Engineer  
Sacramento County Department of Water Resources  
827 7<sup>th</sup> Street, Room 301  
Sacramento, CA 95814

Dear Mr. Booth:

We have received documentation from Reclamation District 800, confirming their adoption of the *Sacramento County Local Hazard Mitigation Plan*. This jurisdiction is now in compliance with the planning requirements of the Disaster Mitigation Act of 2000.

The *Sacramento County Local Hazard Mitigation Plan* is valid for five years from the approval date, June 12, 2017, for all approved participants. The plan must be reviewed, updated and submitted to FEMA Region IX for approval at least once every five years. An updated list of the current status of participating jurisdictions is enclosed with this letter.

The approval of this plan ensures Reclamation District 800's continued eligibility for project grants under FEMA's Hazard Mitigation Assistance programs, including the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program. All requests for funding, however, will be evaluated individually according to the specific eligibility, and other requirements of the particular program under which applications are submitted.

If you have any questions regarding the planning or review processes, please contact Alison Kearns, Senior Community Planner, at (510) 627-7125 or by email at [alison.kearns@fema.dhs.gov](mailto:alison.kearns@fema.dhs.gov).

Sincerely,

Juliette Hayes  
Division Director  
Mitigation Division  
FEMA Region IX

cc: Julie Norris, Mitigation and Dam Safety Branch Chief, California Governor's Office of  
Emergency Services  
Jennifer Hogan, State Hazard Mitigation Officer, California Governor's Office of Emergency  
Services

[www.fema.gov](http://www.fema.gov)

Status of Participating Jurisdictions as of May 1, 2018

Jurisdictions – Adopted and Approved		
#	Jurisdiction	Date of Adoption
1	Sacramento County	7/11/2017
2	Citrus Heights, City of	10/12/2017
3	Elk Grove, City of	8/23/2017
4	Folsom, City of	8/22/2017
5	Galt, City of	8/15/2017
6	Isleton, City of	7/26/2017
7	Rancho Cordova, City of	10/16/2017
8	Sacramento, City of	5/9/2017
9	Brannan Andrus Levee Maintenance District (RD's 317, 407, 2067)	12/14/2017
10	Cosumnes Community Services District Fire Department	9/6/2017
11	Los Rios Community College District	8/9/2017
12	Reclamation District 3	12/21/2017
13	Reclamation District 341	11/14/2017
14	Reclamation District 369	3/5/2018
15	Reclamation District 551	7/18/2017
16	Reclamation District 554	12/19/2017
17	Reclamation District 556	12/19/2017
18	Reclamation District 563	7/11/2017
19	Reclamation District 800	8/3/2017
20	Reclamation District 1000	7/14/2017
21	Reclamation District 1002	12/12/2017
22	Reclamation District 1601	7/18/2017
23	Reclamation District 2111	2/20/2018
24	Sacramento Area Sewer District	9/13/2017
25	Sacramento County Water Agency	7/11/2017
26	Sacramento Metro Fire District	9/28/2017
27	Sacramento Regional County Sanitation District	9/13/2017
28	Southgate Recreation and Park District	9/19/2017
29	Twin Rivers School District	8/8/2017

Jurisdictions – Approvable Pending Adoption	
#	Jurisdiction

## TABLE 1 STATUS OF HAZARD MITIGATION ACTIONS

<b>TABLE 1 Status of Hazard Mitigation Actions</b>						
Action No.	Title	Status	Agency/Dept	2019	July 2021	Contact
				Status of Mitigation Actions	Status of Mitigation Actions	
1	Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	finished	Sacramento County Planning Department	Included by reference in the Safety Element - activity is completed	completed	John Lundgren
2	Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	continuing	Sacramento County staff, various Departments	Continuous effort	continuous	Dawn Pimentel
3	Increase pedestrian and bicycle evacuation routes by constructing regional bike/pedestrian trail infrastructure, and expanding connection to neighborhoods (particularly in vulnerable areas)	continuing	Regional Parks, Dept Transportation, Planning, others	The 47 <sup>th</sup> Avenue Pedestrian and Bicycle Improvement Project is scheduled for construction in 2020. This project will provide infill sidewalk and continuous, Class II bicycle facilities on 47 <sup>th</sup> Avenue between the light rail tracks at the City/County border and Stockton Boulevard. The Auburn Boulevard Bike/Pedestrian Improvement Project is scheduled for construction in late 2019. This project includes infill sidewalk and Class II bicycle facilities on Auburn Boulevard between	Bicycle/pedestrian bridge across Discovery Park connecting Garden Highway to the Jibboom Street bridge	Steve White
4	Community Rating System (CRS) Program for Public Information (PPI)	continuing	Water Resources	This is a continuous annual program	continuous	Dawn Pimentel
5	Flood Insurance Assessment, Awareness, and Promotion	continuing	Water Resources	Continuous effort	continuous	George Booth
6	Public Outreach Mailers	continuing	Water Resources	Continuous effort	continuous	George Booth
7	Toxic Substance Release to rivers and creeks	continuing	Water Resources	Continuous effort	should we add this to update to LHMP?	Dana Booth
8	Increase average [ fossil] fuel efficiency and [renewable fuel consumption to] reduce GHG emissions from the County Fleet and Fuels	continuing	Dept General Services and others	Sacramento County was recognized as the 2018 - #1 Government Green Fleet in North America. Sacramento County Fleet services continues to replace vehicles and equipment with zero and reduced emission vehicles (electric and hybrid) By year end 2018 Sacramento County migrated 59% of total fuel consumption to alternative, renewable, or advanced technology (including hybrids).	should we add this to update to LHMP?	Keith Leech
9	Reduce Sacramento County's vulnerability to Climate Change by reducing GHG emissions in the commercial and residential sectors by making energy efficiency a priority through building code improvements [and advancing adoption of zero emission vehicles and infrastructure.]	continuing	Office of Sustainability, [Building Inspection Dept] and others	Sacramento County continues to implement the State Building Codes and Title 24 Energy Standards. The County provides continued leadership to the growing Sacramento Area Plug-in Electric Vehicle Collaborative, whose primary goals are to advance adoption of electric vehicle use and provide for charging infrastructure to serve the growing needs. New charging stations continue to be installed across the County but primarily in the City of Sacramento where incentives and progressive policies have been adopted to encourage electric car share, curbside charging and other uses.	should we add this to update to LHMP?	

<b>Status of Hazard Mitigation Actions</b>						
<b>Action No.</b>	<b>Title</b>	<b>Status</b>	<b>Agency/Dept</b>	<b>2019 Status of Mitigation Actions</b>	<b>July 2021 Status of Mitigation Actions</b>	<b>Contact</b>
10	Mitigate Climate Change impacts by integrating climate change research and adaptation planning into County operations and services	continuing	Office of Sustainability and others	Resources, expertise and workshops are regularly provided by the Capital Region Climate Readiness Collaborative (CRCRC). County employees and others across Sacramento are encouraged to attend and participate. The County Planning Department is in the process of doing a Climate Action and Adaptation Plan. The CRCRC worked closely with the County during the initial development of the LHMP, and many of the comments and information provided was included in the final LHMP document.	should we add this to update to LHMP?	
11	Reduce Sacramento County's vulnerability to extreme heat events and associated hazards by increase tree planting/canopy preservation/enhancement	continuing	Office of Sustainability and others	Sacramento County Departments of Public Health and Transportation are participating in an Urban Heat Island (UHI) project being done by the SMAQMD in partnership with the CRC, SMUD, Tree Foundation and others. the partnership seeks the best ways to address and reduce UHI and also balance for the increased desire for solar. The County Public Health Department now has a Planner who is a Steering Committee member for the CRCRC.	should we add this to update to LHMP?	
12	Implement Water Supply Capital Improvement Plan	continuing	Water Resources	Continuous progress is being made through construction of Capital Improvement Projects.	continuous	David Bolen
13	Keep the Plan for Public Information current	continuing	Water Resources	Continuous effort	continuous	Dawn Pimentel
14	Alder Creek flood control	continuing	Water Resources	The Glenborough project is conditioned to construct flood control improvements to mitigate impact. This activity will be amended in the next LHMP update.	This is Action 22 in LHMP update	Michael Johnson
15	Alder Creek flood mitigation (dam)	continuing	Water Resources	The developer must secure the 100-yr old dam before beginning phase 2 development of Glenborough. Meeting at the site in May 2019.	This is Action 22 in LHMP update	City of Folsom/ Gencorp
16	Alder Creek miners' reservoir	continuing	City of Folsom, developer	The County did a water quality study. Meetings in 2019 to discuss how the City and Aerojet plan to stabilize the dam.	This is Action 22 in LHMP update	George Booth
17	Delta Small Community flood protection [study]	continuing	Water Resources	This study will consider the fragility of the existing levee flood control systems and resulting risk, then look at ways to reduce the flood risk. Interested parties should see the Delta page at <a href="http://www.StormReady.org">www.StormReady.org</a>	This is Action 19 in LHMP update	George Booth

2021 Annual Report - Local Hazard Mitigation Plan, dated December 2016

Status of Hazard Mitigation Actions						
Action No.	Title	Status	Agency/Dept	2019 Status of Mitigation Actions	July 2021 Status of Mitigation Actions	Contact
18	Gum Ranch flood control	continuing	Water Resources	The developer is conditioned to construct flood control features (see #34 below)	this is constructed	Michael Johnson & George Booth
19	Implement Storm Drain Capital Improvement Plan	continuing	Water Resources	Continuous progress is being made through construction of Capital Improvement Projects.	this is Action 20. Implement Projects in the Stormwater Capital Improvement Program Master Plan, in the LHMP update	David Bolen
20	Laguna Creek at Triangle Aggregate flood control joint use basins	continuing	Water Resources	The miners constructed a side channel weir allowing peak flood flow in Laguna Creek to spill into the north mining pit. Water Resources staff is continuing discussion on long term plan for flood control in this area.	Aggregate mines in the LHMP update	George Booth
21	Laguna Creek mitigate flood hazard south of Jackson Highway	continuing	Water Resources with City of Rancho Cordova	Sunrise Blvd will continue to be prone to flooding between Jackson Hwy and Grantline Rd. Water Resources staff is working with the City of Rancho Cordova development plans so as not to exacerbate this condition.	dropped in LHMP update	George Booth
22	Model Sacramento River levee breach (LAMP) south of Freeport	continuing	Water Resources with Maintenance Area 9 and FEMA	The initial discussion with FEMA took place in 2015, feasibility will be considered with the flood risk reduction plan for Hood (see #17). The Delta Investment Strategy final report estimates that this reach of river levee (operated and maintained by CA DWR MA-9) has a 1:14 year chance of failure. On Nov 1 2018, there was an emergency management exercise based on a breach in this location.	completed	George Booth
23	Morrison Creek Miners' Reach Flood Insurance Study	continuing	Water Resources	A detailed hydrology and hydraulic model is being prepared by the proponents of the West Jackson Plan.	Aggregate mines in the LHMP update	Michael Johnson
24	Morrison Creek Miners Reach levee improvements	continuing	Water Resources	The miners relocated Morrison Creek and mined either side, there are levees on either side of the creek that must be improved if the County is to consider the West Jackson Plan. If that plan does not progress, a long term mine reclamation plan should include improvements to the levees.	Aggregate mines in the LHMP update	Michael Johnson
25	Outreach storm watch guide (ALERT, Stormready, weather radio)	continuing	Water Resources	Inform residents about flood preparedness, buying flooding insurance, as well as imminent threats during flood events through department website, mainstream and social media.	dropped in LHMP update	Matt Robinson
26	Peak flow floodplain mitigation Arcade Creek near Auburn Blvd	continuing	Water Resources with the City of Sacramento	County DWR staff is interested to know if there is a way to mitigate the sediment deposition and to improve conveyance through this reach.	Action24 in LHMP update	George Booth
27	Risk Map (flood frequency, depth, velocity)	not started	Water Resources	Risk Map for flood hazards provides the property owner with valuable information including frequency, depth and velocity. FEMA is promoting this concept and if funded it may be considered for watersheds in the County.	Action 20 in LHMP update	George Booth

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<b>Status of Hazard Mitigation Actions</b>						
<b>Action No.</b>	<b>Title</b>	<b>Status</b>	<b>Agency/Dept</b>	<b>2019 Status of Mitigation Actions</b>	<b>July 2021 Status of Mitigation Actions</b>	<b>Contact</b>
28	Elevation & Acquisition Projects (to Mitigate Flood Risk)	continuing	Water Resources	There are about 80 homes slated and a condominium complex to be lifted and a building on Dry Creek to be acquired and more grant opportunities.	Action 11 Acquire flood prone properties and Action 30 elevate houses in the LHMP update	George Booth
29	Repetitive Loss Properties (to Mitigate Flood Risk)	continuing	Water Resources	Some repetitive loss property owners are considering mitigation measures utilizing grant funding from FEMA	Action 19 in the LHMP update	George Booth
30	Five-Year Capital Improvement Plan – Drainage Projects	continuing	Water Resources	Continuous progress is being made through construction of Capital Improvement Projects.	Action 20 in LHMP update	David Bolen
31	Arcade Creek Corridor Plan	continuing	Water Resources with cities of Citrus Heights and Sacramento	The ped. bridge project crossing Arcade Creek, is an example of cooperation under this program (see also Action 26).	Action 1 in LHMP update Arcade Creek erosion repairs and Action 24 Arcade Creek flood control	George Booth
32	Elevate Homes on Long Island (Grand Island Road, Sacramento River)	finished	Homeowner, FEMA Grant, Water Resources	One house was lifted in 2016, another is slated for 2021 FEMA grant. There may be one more on this island.	dropped in LHMP update, no need to be specific to location	George Booth
33	Repetitive Loss Church Building on Dry Creek	continuing	Property owner, FEMA Grant, Water Resources	FEMA grant application was submitted April 2019 (see Board report 4-9-19)	dropped in LHMP update, no need to be specific to location	George Booth
34	South Branch Arcade Creek – Gum Ranch Basin (with Fair Oaks Park District) and Kenneth Avenue Bridge Improvements (with Sacramento County Department of Transportation)	continuing	n/a	This activity in the LHMP will be amended in the next update. The detention basin is part of the grading plan for Gum Ranch.	completed	Michael Johnson
35	Dry Creek Flood Hazard Mitigation Acquisitions with County Regional Park Department	no activity	County Parks	Two parcels were assessed, but no acquisition moved forward. Will assess feasibility of acquisitions along Cherry Lane.	dropped in LHMP update, no need to be specific to location	Liz Bellas/Mikki McDaniel
36	Arcade Creek at Evergreen Estates Floodwall Improvements	continuing	Developer with Water Resources	Water Resources stocks flood-fight materials and the ALERT stream/rain gage system is monitored by residents (see Action 26).	Action 24 Arcade Creek flood control in LHMP update	George Booth
37	Linda Creek Peak Flow Mitigation	no activity	Water Resources with Placer County	There is no flood control project being considered	not included in LHMP update	George Booth
38	Flood Preparation in the American River Parkway	continuing	County Parks with Water Resources	The Sheriff works closely with the dam operators so that camper and recreational users of the parkway have adequate warning when releases are occurring. CA DWR is promoting the idea of high-water marks on the parkway.	completed	

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<b>Status of Hazard Mitigation Actions</b>						
<b>Action No.</b>	<b>Title</b>	<b>Status</b>	<b>Agency/Dept</b>	<b>2019 Status of Mitigation Actions</b>	<b>July 2021 Status of Mitigation Actions</b>	<b>Contact</b>
39	Improve County ALERT (Automated Local Evaluation in Real Time) System of Stream and Rain Gauges	continuing	Water Resources with County OES	Water Resources staff upgraded the ALERT system with a small computer at each station that gathers the real time data and sends it in batches to the main server. This allows for cleaner communication between the stations and the base. Next projects include adjustment of the onsite staff gages to the NAVD vertical datum and adding cameras to certain stream gage locations.	not included in LHMP update	George Booth
40	Update County Hydrology Standards	continuing	Water Resources	Phase 1 is underway, looking at rainfall data and projecting forward.	Action 35 in the LHMP update	George Booth
41	Woodside Condominiums Repetitive Flood Loss Property	continuing	Water Resources with Woodside HOA	Grant application to lift 90 units is in the queue at FEMA	Woodside HOA said no thank you to two large hazard mitigation grants awarded by FEMA and another \$1M from the County.	George Booth
42	Bridge Replacement on Elk Grove Florin Road at Elder Creek	scheduled	Transportation	The Elk Grove Florin Road Widening Project is scheduled for construction in 2019-20. The project includes replacement of the existing, functionally obsolete, bridge at Elder Creek. The bridge replacement is scheduled for completion in 2020.	completed	Steve White/ Mellisa Wright
43	Michigan Bar Bridge Replacement at the Cosumnes River	scheduled	Transportation	The Michigan Bar Bridge Replacement at Cosumnes River is scheduled for construction in 2020. This project includes replacement of the existing, functionally obsolete bridge.	not included in LHMP update	Steve White
44	El Camino Avenue Phase 2 Road Improvements	scheduled	Transportation	The El Camino Avenue Phase 2 Road Improvements Project provided Class II bicycle facilities and sidewalk connectivity on El Camino Avenue between Watt Avenue and Avalon Way. Construction was completed in 2017.	not included in LHMP update	Steve White
45	Improve Flood Protection and/or Evacuation Planning for Mobile Home/RV Park at Manzanita/Auburn. Alternatively, the Park Should Establish Flood Warning and evacuation procedures.	continuing	Property owner, Water Resources	Water Resources staff is in communication with the owners.	Still important, subject to owner interest. This is not included in LHMP update, as it is unlikely FEMA grants can help.	George Booth
46	Hydromodification and Stormwater Quality Countywide	continuing	Water Resources	implementation phase	On-going, but not included in the LHMP update as it is unlikely FEMA grants can help.	Dana Booth
47	Evacuation Mapping	finished	Levee RDs, County OES, City of Sacramento, Water Res.	Each levee maintaining agency created evacuation plans including mapping.	Action 4 and 32 in LHMP update	George Booth
48	Regional Flood Management Plan Projects	continuing	Levee RDs, SAFCA, Water Resources	Delta small communities flood risk reduction planning effort is underway. The urban areas 200-yr levee improvements are underway.	dropped	George Booth
49	Erosion Site Repairs	continuing	Water Resources	Creek erosion repairs are reviewed and managed based on public risk, flooding, and environmental regulations	included on Arcade Creek	Rod Goss
updated July 2021 by Water Resources, G. Booth						