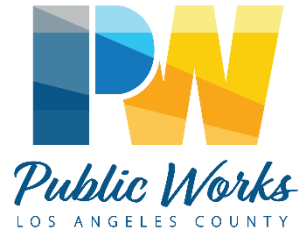


COUNTY OF LOS ANGELES FLOODPLAIN MANAGEMENT PLAN PROGRESS REPORT



2021-2022

**COUNTY OF LOS ANGELES
FLOODPLAIN MANAGEMENT PLAN
PROGRESS REPORT 2021-2022**

Table of Contents

| | |
|--|----|
| Background..... | 2 |
| Purpose | 3 |
| Flood Events within the Planning Area..... | 3 |
| Changes in Risk Exposure in the Planning Area | 6 |
| Mitigation Success Stories | 6 |
| Floodplain Management Plan Progress | 7 |
| Summary Overview of the Plan’s Progress..... | 7 |
| The Floodplain Management Plan Steering Committee..... | 8 |
| Review of the Action Plan..... | 9 |
| Recommendations for Changes or Enhancements..... | 21 |
| Program for Public Information Implementation..... | 21 |
| Summary Overview of Implementation | 21 |
| The Program for Public Information Committee..... | 21 |
| Review of the Outreach Projects | 21 |

County of Los Angeles
Comprehensive Floodplain Management Plan and
Program for Public Information
2022 Annual Progress Report

REPORTING PERIOD: June 15, 2021 – June 14, 2022

BACKGROUND: The County of Los Angeles participates in the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA) and in the NFIP's Community Rating System. In compliance with the NFIP, the County of Los Angeles prepared a Comprehensive Floodplain Management Plan, which is an overall strategy of programs, projects, and measures aimed at reducing the adverse impact of flood hazards in the community.

Throughout the years, Floodplain Management Plans have evolved to meet the needs of the community and to comply with applicable regulations. The first plan, titled "*Repetitive Loss Plan for the National Flood Insurance Program Community Rating System (CRS) for the County of Los Angeles*" was adopted by the County of Los Angeles Board of Supervisors in 1992 and approved by FEMA. A subsequent Floodplain Management Plan for repetitive loss properties was prepared and approved in 2002 by FEMA. In 2015, the County of Los Angeles prepared the *Comprehensive Floodplain Management Plan*, which expanded beyond the repetitive loss areas to include all unincorporated areas in Los Angeles County. This plan was adopted by the Los Angeles County Board of Supervisors in 2016. In 2020, the County of Los Angeles updated the Comprehensive Floodplain Management Plan which was adopted by the County of Los Angeles Board of Supervisors on June 15, 2021.

The County of Los Angeles also prepared the *Los Angeles County Repetitive Loss Area Analysis* as a companion document to the Comprehensive Floodplain Management Plan. "Repetitive loss properties" are properties for which two or more claims of \$1,000 or more had been paid by the NFIP within any rolling 10-year period since 1978. A repetitive loss area includes property nearby that are not repetitive loss properties, but due to their proximity may face a similar flood risk. This document provides an assessment of flooding and possible mitigation methods for repetitive loss areas. Repetitive loss areas were determined using a reverse of the depth-damage-function to determine the floodwater elevation and the possible extent of the flood hazard. The local drainage conditions were then considered to determine which of these neighboring properties may be susceptible to damage by that flood.

The Comprehensive Floodplain Management Plan was developed to meet the following objectives:

- Comply with local, State, and Federal requirements for floodplain management planning.
- Coordinate existing plans and programs to facilitate the implementation and funding of high-priority initiatives and projects to mitigate possible disaster impacts.
- Create a linkage between the Comprehensive Floodplain Management Plan and other plans established by the County of Los Angeles, so they can work together in achieving successful flood mitigation.

The updated Comprehensive Floodplain Management Plan is available online at:
<https://dpw.lacounty.gov/wmd/NFIP/FMP/Plan.aspx>

The County of Los Angeles also developed a Program for Public Information to identify, prepare, implement, and monitor a range of flood-related public information activities that meet specific, local needs. The Program for Public Information (PPI) framework is described in Chapter 14 of the Comprehensive Floodplain Management Plan.

PURPOSE: The purpose of this progress report is to provide an annual update on the implementation of the action plan identified in the Comprehensive Floodplain Management Plan and on the implementation and evaluation of the outreach projects identified in the PPI. The objective is to ensure there is a continuing and responsive planning process that will keep the Floodplain Management Plan and related outreach efforts dynamic and responsive to the needs and capabilities of the County of Los Angeles and stakeholders. This report discusses the following:

- Flood events that have occurred during the reporting period (June 15, 2021, to June 14, 2022)
- Changes (if any) in risk exposure within the planning area (unincorporated County of Los Angeles)
- Mitigation success stories
- Changes (if any) in capabilities that could impact plan implementation
- Comprehensive Floodplain Management Plan implementation status
 - Review of the action plan
 - Recommendations for changes/enhancement
- Program for Public Information implementation and evaluation status
 - Review of the outreach projects
 - Review on progress toward desired outcomes
 - Recommendations for changes/enhancement

FLOOD EVENTS WITHIN THE PLANNING AREA: According to the County of Los Angeles precipitation records from October 1, 2020, to September 30, 2021 (the 2020-21 Water Year), the Downtown Los Angeles rain gage (Station No. 716) recorded 5.58 inches of rain. This is about 64 percent below the average annual rainfall of 15.30 inches. The precipitation records at Station No. 716 from October 1, 2021, to April 30, 2022 (the 2021-22 Storm Season), recorded 12.28 inches of rain, which is 16 percent below the average annual rainfall of 15.30 inches. If it does not rain again before September 30, 2022 (the end of the 2021-22 Water Year), it will be 20 percent below the average annual rainfall. During the reporting period, there were two flood events in the planning area that had a measurable impact on people or property. A summary of these events follows:

1. Rainfall Event Dates: December 13 to 14, 2021

Rainfall Totals: Between 0.4 to 2.3 inches in the valleys and along the coast,
 between 1.1 to 7.6 inches in the foothills and mountains, and
 between 0.8 to 1.9 inches in the desert areas

Notable Impacts/Issues:

- The National Weather Service issued several warnings including: a flood advisory, flash flood watch, winter storm warning, and winter weather advisory.
- Evacuation warnings were issued to residents in Azusa, Monrovia, in the unincorporated communities of Valyermo, Juniper Hills, and Devil’s Punchbowl

(Bobcat Fire burn areas), and in the unincorporated community of Lake Hughes and the area of King Canyon Road (Lake Fire burn areas).

- Public Works staff in coordination with the Los Angeles County Sheriff's Homeless Outreach Service Team (HOST) and the Los Angeles Homeless Services Authority (LAHSA) teams provided notification of the upcoming storm to people experiencing homelessness along Los Angeles County Flood Control District rivers and channels.
 - At some locations, immediate cleanups were performed during notifications which included an underground portion of Vernon Channel within Rowland Heights.
- Road hazards due to storm
 - Bouquet Canyon Rd (Angeles National Forest) was overflowed and was closed throughout the rainstorm event.
 - Part of Lake Hughes Rd was closed due to debris/mud from mudslide. Lake Hughes Rd burn areas were also closed.
 - Pine Canyon Rd was closed due to debris/mud on the road.
 - Mt. Wilson Red Box Rd (Angeles National Forest) was closed due to debris/rock flow.
 - Glendora Mountain Rd and Glendora Ridge Rd (Angeles National Forest) were closed due to debris and rock flow.
 - Chantry Flats Fire Rd (Angles National Forest) in Bobcat Fire recovery area was closed due to a mudslide was blocking a portion of the road.
 - Several other roads in the Angeles National Forest were closed due to predicted snow and ice, including Upper Big Tujunga Canyon Rd, Big Tujunga Canyon Rd, and Angeles Forest Hwy.

2. Rainfall Event Dates: December 29 to 30, 2021

Rainfall Totals: Between 1.3 to 5.6 inches along the coast and in the valleys, between 1.5 to 8.7 inches in the foothills and mountains, and between 0.8 to 1.2 inches in the desert areas

Notable Impacts/Issues:

- The National Weather Service issued a flash flood watch for the burn areas and a winter storm warning for the mountains.
- Public Works staff in coordination with Sheriff HOST and LAHSA teams provided notification of the upcoming storm to people experiencing homelessness along Los Angeles County Flood Control District rivers and

channels. Notification to move out of harm's way was conducted prior to the rain event.

- Road hazards due to storm
 - Mulholland Hwy from Las Virgenes Rd to Cornell Rd (Santa Monica Mountains) was closed due to heavy mudflows and rockfall.
 - Angeles Forest Hwy from Aliso Canyon Rd to Angeles Crest Hwy (Angeles National Forest) was closed due to storm and icy conditions.
 - Big Tujunga Canyon Rd from Angeles Forest Hwy to Vogel Flats Rd (Angeles National Forest) was closed due to storm and icy conditions.
 - Upper Big Tujunga Canyon Rd from Angeles Forest Hwy to Angeles Crest Hwy (Angeles National Forest) was closed due to storm and icy conditions.
 - Lake Hughes Rd from Dry Gulch Rd to Pine Canyon Rd (Angeles National Forest) was closed due to mudslide, debris, and snow.
 - Glendora Mountain Rd from East Fork Rd to Big Dalton Canyon Rd (Angeles National Forest) was closed due to rockslides and debris.
 - Glendora Ridge Rd from Glendora Mountain Rd to Mount Baldy Rd (Angeles National Forest) was closed due to rockslides.
 - Big Pines Hwy from Largo Vista Rd to Angeles Crest Hwy (Angeles National Forest) was closed due to snow.
 - Country Wy and Crown Valley Rd (Acton) were closed due to flooding.
 - Pine Canyon Rd from Lake Hughes Rd to 3 Points Rd (west Antelope Valley) was closed due to mud and debris.
 - Malibu Canyon Rd (Santa Monica Mountains) was temporarily closed due to large boulder from rockslide.
- A sinkhole was reported at the Franklin D. Roosevelt Park stormwater capture project (Florence-Firestone area). Department of Parks and Recreation crew barricaded the sinkhole. Stormwater Maintenance Division provided corrective action.
- A clogged catch basin was reported at 1336 E. 82nd St. (Florence-Firestone area). Road Maintenance Division identified accumulation of water in the gutter and cross gutter due to vehicles parked at the mouth of the catch basin.
- Flooding was reported around Oxford Basin (Marina del Rey) due to increase in tidal flow and severity of the storm. Public Works crew installed a 10" pump to help relieve excess water in the basin and a 6" pump was dispatched to the north side of Washington Blvd. Excess water was subsided and no road closures were needed.

CHANGES IN RISK EXPOSURE IN THE PLANNING AREA: Not applicable during this reporting period.

MITIGATION SUCCESS STORIES:

1. Gates Canyon Stormwater Improvement Project

Los Angeles County Public Works' Gates Canyon Stormwater Improvement Project is located in the unincorporated area of Calabasas, CA. The urban runoff and stormwater from the 105 acres of residential land and neighboring area is captured, stored, and treated to irrigate the landscape at Gates Canyon Park. The use of this water will help offset other water demands, as well as improve downstream waterbodies such as the Las Virgenes Creek and Malibu Creek.

2. 103rd Street Green Improvement Project

Los Angeles County Public Works' 103rd Street Green Improvement Project is located in the unincorporated area of Athens-Westmont. The project will add ecological infrastructure components to a road rehabilitation project. With the use of bioswales and porous concrete, the green improvements along the roadway and adjacent parking areas will capture and use urban runoff and stormwater. This collected water will help offset drought conditions as well as improve downstream waterbodies such as Compton Creek and the Los Angeles River.

3. East Los Angeles Sustainable Median Stormwater Capture Project

Los Angeles County Public Works' East Los Angeles Sustainable Median Stormwater Capture Project, located in the unincorporated area of East Los Angeles, will improve water quality, increase water supply and enhance recreation and the community. This recently completed project will capture and infiltrate approximately 21 acre-feet of urban and stormwater runoff from a 3,000-acre tributary area of mostly residential and commercial land areas. The use of infiltration wells and bioswales will divert stormwater runoff into underground aquifers, replenishing our local groundwater supply. The project also includes above-ground improvements such as jogging paths, drought-tolerant landscaping, over 300 planted trees, and educational signage.

4. Franklin D. Roosevelt Park Regional Stormwater Capture Project

Los Angeles County Public Works' recently completed Franklin D. Roosevelt Park Regional Stormwater Capture Project is located in the unincorporated area of Florence-Firestone. The project consists of several improvements to the park to increase water conservation, improve water quality, and provide additional recreation, education, and outreach benefits to Park visitors. The Park encompasses approximately 24 acres and lies adjacent to the Glen Avenue Drainage System that discharges into Compton Creek, which is a tributary of the Los Angeles River, both of which are water quality impaired. The project is diverting dry- and wet-weather flows from the Glen Avenue Drainage System to provide pre-treatment of water for infiltration to the groundwater basin. The project has multiple benefits, including water quality improvements, water conservation, Park facility upgrades, and education and outreach signage.

5. Bobcat Fire (South Face) Postfire Mitigation (K-Rail Placement)

The Bobcat Fire burned over 115,746 acres within the Angeles National Forest including several canyons directly above and adjacent to Oakglade Canyon in the City of Monrovia. Two canyons were nearly burned 100 percent and could potentially produce a large amount of debris flow. Moreover, these debris flows could impact the Los Angeles

County Flood Control District's Oakglade Debris Basin and adjacent Flood Control District inlets directly above 24 residential properties. Los Angeles County Public Works' Stormwater Engineering Division (SWED) took immediate measures and coordinated the emergency response with the City of Monrovia and its Fire Department, and the Natural Resources Conservation Service (NRCS) to meet and survey the burned area. Following the meeting, SWED and NRCS concurred that the community was at serious risk from potential debris flows during storm events. As a result, k-rail protection measures were installed by the City of Monrovia to protect 24 residences.

CHANGES THAT MAY IMPACT IMPLEMENTATION OF THE PLAN:

1. Physical Map Revision for Santa Clara River Watershed

The Federal Emergency Management Agency (FEMA) performed an updated Flood Insurance Study and a Physical Map Revision of Flood Insurance Rate Maps (FIRMs) for the Santa Clara River Watershed. The updated flood hazard boundaries became effective on June 2, 2021.

This revision affected FEMA's FIRM Panel Nos. 06037C0600F, 06037C0625F, 06037C0640F, 06037C0645F, 06037C0800F, 06037C0805F, 06037C0810F, 06037C0815F, 06037C0830F, 06037C0835F, 06037C0840F, 06037C0845F, 06037C0875F, 06037C0900F, 06037C0925F, 06037C1031F, 06037C1032F, and 06037C1075F. Public Works mailed letters and maps to affected property owners showing the changes to the flood zones on their properties. Public Works also held two virtual meetings for the residents to explain the changes. The first was on February 17, 2021, for the Acton, Agua Dulce, and Canyon Country residents. The second was on February 18, 2021, for the Castaic and Val Verde residents.

2. Physical Map Revision for Open Pacific Coast

FEMA performed an updated Flood Insurance Study and a Physical Map Revision of FIRMs for the Open Pacific Coast in Los Angeles County, from the Ventura County Line to the Orange County Line. The updated flood hazard boundaries became effective on April 21, 2021.

This revision affected FEMA's FIRM Panel Nos. 06037C1487G, 06037C1491G, 06037C1492G, 06037C1511G, 06037C1512G, 06037C1536G, 06037C1537G, 06037C1541G, 06037C1542G, 06037C1561G, 06037C1562G, 06037C1590G, 06037C1752G, 06037C1754G, 06037C1941G, and 06037C2031G. Public Works mailed letters and maps to affected property owners showing the changes to the flood zones on their properties.

FLOODPLAIN MANAGEMENT PLAN PROGRESS

Summary Overview of the Plan's Progress: The performance period for the updated Comprehensive Floodplain Management Plan became effective on June 15, 2021, with the final approval of the Plan by the Board of Supervisors. The performance period for this plan will be five years, with an anticipated update to the plan to occur by 2025. As of the end of this reporting

period, the performance period for this Plan is considered to be 70 percent complete. The Plan has targeted 37 flood hazard mitigation initiatives to be pursued during the 5-year performance period. As of the reporting period, the following overall progress can be reported:

- 14 out of 37 initiatives (37.8 percent) reported ongoing action toward completion.
- 22 out of 37 initiatives (59.5 percent) were reported as being complete, continue to implement as necessary.
- 1 out of 37 initiatives (2.7 percent) reported no action taken.

The Floodplain Management Plan Steering Committee: The Floodplain Management Plan Steering Committee, made up of stakeholders within the planning area, reviewed and approved this progress report at its annual meeting held on July 12, 2022. It was determined through the plan's development process that a Steering Committee would remain in service to oversee maintenance of the plan. The Steering Committee provided technical review and oversight on the development of the annual progress report. As the implementation of the Floodplain Management Plan moves forward, it is anticipated that there will be turnover in the membership annually, which will be documented in the progress reports. For this reporting period, the Steering Committee membership is as indicated in Table 1.

**TABLE 1
STEERING COMMITTEE MEMBERS
(REPORTING PERIOD JUNE 15 2021 – JUNE 14, 2022)**

| Name | Jurisdiction/Agency |
|-----------------------------|---|
| Patricia Wood (Chairperson) | Los Angeles County Public Works Stormwater Engineering - CRS Coordinator |
| Gina Natoli (Chairperson) | Los Angeles County Regional Planning |
| Loni Eazell | Los Angeles County Public Works Disaster Services Group |
| RaChelle Taccone | Los Angeles County Public Works Building & Safety |
| Jemellee Cruz | Los Angeles County Public Works Stormwater Maintenance, |
| Martin Araiza | Los Angeles County Public Works Stormwater Engineering - Hydrology & Hydraulics |
| Cung Nguyen | Los Angeles County Public Works Stormwater Planning |
| Angela Ovalle | Los Angeles County Public Works Community Government Relations Group |
| Scott Gardner | Los Angeles County Fire Department |
| Susan Shu | Los Angeles City Bureau of Engineering |
| Harry Semerdjian | Los Angeles Chamber of Commerce |
| Dorothy Wong | Altadena Town Council |
| Shannon Ggem | Malibou Lake Mountain Club |
| John Blalock | Resident, Antelope Valley |
| Thomas Hill | American Red Cross, Los Angeles Region |
| Salomon Miranda | California Department of Water Resources |
| Dr. Stephen Ladochy | Cal State Los Angeles Meteorology |
| Debbie Sharpton | Environmental Restoration Group |

Review of the Action Plan: Table 2 reviews the action plan, reporting the status of each initiative. Reviewers of this report should refer to the Comprehensive Floodplain Management Plan for more detailed descriptions of each initiative and the prioritization process.

The “status” column of Table 2, addresses the following:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?
- If the initiative was completed, does it need to be changed or removed from the action plan?

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|---|----------|--|-----------------------------|
| Initiative No. 1 — Promote awareness of flood hazards to residents in flood hazard areas. | | | |
| Yes | High | In November 2021, Public Works mailed 3,224 copies of "Are You Prepared for A Flood?" brochure to property owners and residents in Special Flood Hazard Areas, County Floodways, and possible gaps in floodplain mapping. The County of Los Angeles' National Flood Insurance Program (NFIP) website links were checked and updated. Brochures were distributed to the Castaic, Lancaster, Malibu, Quartz Hill, and Topanga Public Libraries. Brochures were also distributed to the Los Angeles County Building and Safety offices. | ✓ |
| Initiative No. 2 — Develop and distribute flood protection information and materials to property owners, renters, and developers in high-risk areas. | | | |
| Yes | High | In November 2021, Public Works mailed 3,224 copies of "Are You Prepared for A Flood?" brochure to property owners and residents in Special Flood Hazard Areas, County Floodways, and possible gaps in floodplain mapping. Additionally, links to County of Los Angeles and FEMA publications were included in the letters mailed to all property owners, and residents in Repetitive Loss Properties (RLP) and properties in the Repetitive Loss Areas (RLA). | ✓ |
| Initiative No. 3 — Maintain a list of critical facilities located in FEMA-designated flood zones, provide flood protection information to operators of these critical facilities, and encourage the implementation of flood protection measures. | | | |
| Yes | High | In October 2021, Public Works mailed letters and outreach materials to owners of critical facilities located in FEMA-designated Special Flood Hazard Areas. Critical facilities that received outreach materials include schools, fire stations, and health care facilities. | ✓ |
| Initiative No. 4 — Investigate Repetitive Loss Properties identified by FEMA and update the Repetitive Loss Property and high-risk property list. Conduct the following flood control activities for these properties: | | | |
| <ul style="list-style-type: none"> • Annually notify owners regarding local flood hazards and proper protection activities • Provide technical advice regarding flood protection and flood preparedness • Distribute a revised questionnaire to new Repetitive Loss Properties | | | |
| Yes | High | Public Works performs field visits to all RLP and RLA properties a minimum of once every five years. In December 2021, 235 letters were mailed with links to FEMA and County of Los Angeles publications to all property owners and residents in RLP and RLA properties. | O |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|---|-----------------------------|
| Initiative No. 5 — Make sandbags available to flood risk property owners during the wet season, provide notifications of the availability of these materials, and track the distribution of the materials. | | | |
| Yes | High | Public Works provides sandbags to the Los Angeles County Fire Department for distribution to residents through over 160 local Fire Stations. Demand for sandbags varies from year to year. For the 2021-22 storm season, 42,462 sandbags were distributed to the Los Angeles County Fire Department. Public Works currently maintains over 750,000 sandbags for distribution. Public Works also maintains a website where residents can search for the nearest location to obtain sandbags: http://dpw.lacounty.gov/dsg/sandbags/ | ✓ |
| Initiative No. 6 — Provide public education about maintaining the stormwater system free of debris. | | | |
| Yes | High | <p>In an effort to educate the public and promote behavioral change to prevent stormwater pollution, Public Works implements the Public Information and Participation Program that addresses water quality priorities and stormwater management program priorities. In addition, Public Works continues water education through their Water for LA (www.WaterForLA.com) platform, to provide trusted information to the residents of LA County and inspire them to reevaluate their relationship with water. As part of the Water for LA countywide water educational program, Public Works conducts social media and email outreach to residents and businesses across LA County and implements paid media outreach campaigns consisting of digital display, video, radio, print, and out-of-home ads. Stormwater pollution prevention topics included instructions for properly disposing of household hazardous waste as well as tips on how to reduce pollutants such as pesticides, litter, and other common household chemicals. Other ongoing outreach efforts include:</p> <ul style="list-style-type: none"> • School education outreach programs, Environmental Defenders (K-5th grade) and Generation Earth (6-12th grade) • Used Motor Oil and Oil Filter Campaign • Household Hazardous and Electronic Waste Program • Smart Gardening Program | ✓ |
| <p>Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time</p> | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|---|----------|---|-----------------------------|
| Initiative No. 7 — Continue to maintain/enhance the County’s classification under the Community Rating System to address increased flood insurance costs and promote safety and preparedness. | | | |
| Yes | High | The County of Los Angeles held a CRS class standing of 7 from June 15, 2021 to March 31, 2022. Effective April 1, 2022, the County of Los Angeles holds a CRS class standing of 6. The County continues to maintain and strive to identify activities to help maintain and improve the CRS class rating. | ✓ |
| Initiative No. 8 — Implement the Program for Public Information protocol identified in this plan including appropriate messaging for compliance with ADA. | | | |
| Yes | High | The County of Los Angeles continued implementation of the Program for Public Information. A report detailing the PPI implementation status for the 2021-22 period was approved by the PPI committee on June 23, 2022. | ✓ |
| Initiative No. 9 — Provide emergency preparedness and flood protection information to the general public. | | | |
| Yes | High | <p>The County of Los Angeles provides emergency and flood protection information to the public through different means including:</p> <ul style="list-style-type: none"> • A website specifically devoted to emergency announcements currently happening in the county. http://www.lacounty.gov/emergency/ • A website providing emergency preparation information that includes resources, tips, and facts to equip and alert residents on how to best respond to emergencies and recover from disasters: https://ready.lacounty.gov/ • The County of Los Angeles Chief Executive Office - Office of Emergency Management website features informational resource links to Federal, State, and local government emergency operations departments and agencies, and nongovernmental organizations in the Document Library/Links section: https://ceo.lacounty.gov/emergency-management/ • Various flood hazard videos produced by Public Works and made available through YouTube including: <ul style="list-style-type: none"> - Storm water safety: https://www.youtube.com/watch?v=5jFI6Z-Ld4w - Swift Water: https://www.youtube.com/watch?v=EcOpX7TGY84 https://www.youtube.com/watch?v=2_oejOP_o_k - Storm season evacuation: https://www.youtube.com/watch?v=gqrr1_o4WYA https://www.youtube.com/watch?v=07BHy2Acq-Q | ✓ |
| <p>Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time</p> | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|---|----------|---|-----------------------------|
| Initiative No. 10 — Distribute information regarding flood prevention and flood insurance at emergency operations and emergency preparedness events. | | | |
| Yes | High | Public Works participated with the US Army Corps of Engineers Whittier Narrow's Tabletop Exercise, and Whittier Narrows Inundation Maps and Emergency Action Plans. Public Works also participated in Department of Water Resources' Castaic and Pyramid Dam exercises. | ✓ |
| Initiative No. 11 — Develop and maintain a list of priority maintenance-related problem sites. | | | |
| Yes | High | When Public Works encountered maintenance-related problem sites, Public Works mitigated maintenance-related issues with improvement projects and/or increased maintenance. | ✓ |
| Initiative No. 12 — Conduct routine maintenance of flood control facilities and additional maintenance as needed at priority maintenance-related flood problem sites. | | | |
| Yes | High | Public Works performed and continues to perform routine inspection and maintenance for approximately 3,400 miles of underground storm drains, 620 miles of open channels, 14 dams, 27 spreading grounds, 500 debris basin and retention inlets, 27 sediment placements sites, 56 pump plants, and 166,000 catch basins. | ✓ |
| Initiative No. 13 — Conduct a stormwater facilities condition assessment to identify the physical and hydraulic condition of the system and to support infrastructure management. | | | |
| Yes | High | Public Works' Stormwater Maintenance Division (SWMD) performed routine inspections of Los Angeles County Flood Control District (LACFCD) facilities per SWMD Standard Procedures. During inspections, any deficiencies exceeding LACFCD's Acceptable Maintenance Conditions were noted and corresponding facilities were restored to LACFCD's standards. | ✓ |
| Initiative No. 14 — Evaluate storm drain, open channel, and flood retention basin facilities for future improvements. | | | |
| Yes | High | Public Works routinely conducts studies to determine flood hazard risks and evaluate its flood control facilities to identify potential future improvements. The Sun Valley Upper Storm Drain Project is currently under construction and is anticipated to be completed by the end of December 2022. Stormwater from the northern part of the Sun Valley watershed will be collected through a 4.75-mile-long storm drain system and delivered to the future Rory M. Shaw Wetlands Park, in the City of Los Angeles. This wetlands project is a collaborative effort by the Los Angeles County Flood Control District, the City of Los Angeles, and the Sun Valley Watershed Stakeholders Group. | O |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|---|-----------------------------|
| Initiative No. 15 — Pursue appropriate flood hazard mitigation grant funding. | | | |
| Yes | High | The County of Los Angeles continues to look for opportunities to work with FEMA to identify flood hazard mitigation funding opportunities. Public Works also attended the August 2021 webinar: <i>Technical Assistance and Grant Opportunities for Flood Reduction Benefitting Underrepresented Communities in California</i> . | O |
| Initiative No. 16 — Consider the conversion of high-risk properties into open space. | | | |
| Yes | Medium | Collaboration with owners of high-risk properties to consider the possibility of conversion into open space is consistent with Los Angeles County Public Works' goals to reduce flood risk, improve water conservation and quality, and create recreational opportunities for the County. | O |
| Initiative No. 17 — Refine the plan check system to track properties in the flood zone and address drainage. | | | |
| Yes | Medium | Los Angeles County Public Works has implemented a new plan check database system to better track and address permit requests from properties in flood zones. | ✓ |
| Initiative No. 18 — Flag Repetitive Loss Properties in the plan and check database for review and approval of building permit applications. | | | |
| Yes | High | Los Angeles County Public Works has implemented a new plan check database and is developing a system to flag repetitive loss properties for review and approval of building permit applications | O |
| Initiative No. 19 — Maintain a database system for tracking all reviewed and approved elevation certificates prior to the closure of a building permit. | | | |
| Yes | High | Los Angeles County Public Works has implemented a new plan check database to help track elevation certificates prior to the closure of a building permit. | ✓ |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|---|----------|--|-----------------------------|
| Initiative No. 20 — Evaluate opportunities for incorporating Watershed Ecosystem Restoration into projects. | | | |
| Yes | High | The County of Los Angeles continues to evaluate opportunities for watershed ecosystem restoration. Los Angeles County Public Works is currently working on a multi-benefit project to restore habitat in Bouquet Canyon Creek. The project stretches approximately 8 miles of Bouquet Canyon Creek downstream of Bouquet Reservoir. In 2001, Bouquet Canyon was burned by wildfires. In 2005, major storms on the burned watershed caused significant sediment deposition in the creek. As a result, the creek's flow-carrying capacity has been greatly reduced, which has led to an overall degradation of the habitat along the creek and frequent closures of the adjacent Bouquet Canyon Road. This project aims to restore the habitat in Bouquet Canyon Creek by reestablishing the creek's flow pattern and flow-carrying capacity, to potentially increase fish habitat and replenish the groundwater wells of residents downstream. This will also prevent flow impacts to Bouquet Canyon Road during storm events and water releases from the City of Los Angeles' Bouquet Reservoir. | O |
| Initiative No. 21 — Where feasible, cost-effective and supported both publicly and politically, restore the natural and beneficial functions of floodplains. | | | |
| Yes | Medium | Los Angeles County Public Works continues to evaluate opportunities to restore the natural and beneficial floodplain functions. Public Works is maintaining the completed Santa Anita Habitat Mitigation Project. The project created a habitat in an area previously without vegetation and biodiversity. Public Works collaborated with experts in the field of ecology, arboriculture, wildlife biology, landscape architecture, native plant nurseries and native seed collectors. | O |
| Initiative No. 22 — Encourage the application of biological resource measures for the control of stormwater and erosion to the best of their applicable limits. | | | |
| Yes | High | The County of Los Angeles enforces Low-Impact Development (LID) for stormwater management by adopting a LID ordinance and creating a LID Standards Manual. LID is an approach to stormwater management that works to mimic the natural hydrology of the site by retaining precipitation on-site to the maximum extent practicable. LID strategies are designed to protect surface and groundwater quality, maintain the integrity of ecosystems, and preserve the physical integrity of receiving waters by managing stormwater runoff at or close to the source. | ✓ |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|---|-----------------------------|
| Initiative No. 23 — Maintain the Operational Area Emergency Response Plan | | | |
| Yes | High | In 2012, the County of Los Angeles Board of Supervisors approved the Operational Area Emergency Response Plan (OAERP). The OAERP conforms to the requirements of the National Incident Management System and the California Standardized Emergency Management System. In 2016, the Los Angeles County OAERP Emergency Public Information Annex was created to establish uniform policies for the effective development, coordination, and dissemination of emergency information to the public in case of technological emergency or disaster. The OAERP is currently being updated by the County of Los Angeles Office of Emergency Management and is estimated to be completed in October 2023. | O |
| Initiative No. 24 — Maintain standards for the use of structural and nonstructural techniques that mitigate flood hazards and manage stormwater pollution. | | | |
| Yes | High | Public Works prepared and enforced the 2014 Low Impact Development (LID) Standards Manual, which provides guidance for the implementation of stormwater quality control measures in development projects with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual is currently being updated by Stormwater Quality Division. In addition, Public Works enforces the National Pollutant Discharge Elimination System (NPDES), Best Management Practices for Construction Activities, and requires erosion control sediment plans during the construction phase of residential and commercial projects. | O |
| Initiative No. 25 — Continue to require environmental review in the development process to provide for the creation or protection of natural resources that can mitigate the impacts of development. | | | |
| Yes | High | The County of Los Angeles Regional Planning performs environmental review for land use planning for unincorporated communities in the County of Los Angeles. Projects that generally require an environmental assessment are plan amendments, zone changes, conditional use permits, tentative parcel maps, and tentative tract maps. | O |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|--|-----------------------------|
| Initiative No. 26 — Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone (high-risk) areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses. | | | |
| Yes | High | Public Works continues to enforce NFIP regulations for building permit applications determined to be Substantial Improvement or repair of Substantial Damage to protect the property owner's investment and safety. Over time, this will reduce the number of buildings exposed to flood risk. | ✓ |
| Initiative No. 27 — Use risk-based information from the County of Los Angeles Comprehensive Floodplain Management Plan and the County of Los Angeles Hazard Mitigation Plan to update the Safety Element of the County's General Plan. | | | |
| Yes | High | <p>The current Los Angeles County General Plan was adopted by the County of Los Angeles Board of Supervisors on October 6, 2015.</p> <p>The Safety Element of the County's General Plan works in conjunction with the OAERP. The OAERP, prepared by County of Los Angeles Chief Executive Office (CEO) – Office of Emergency Management, strengthens short- and long-term emergency response and recovery capability, and identifies emergency procedures and emergency management routes in the County of Los Angeles. The Safety Element Update was adopted by the Board of Supervisors on July 12, 2022.</p> <p>The Local All-Hazard Mitigation Plan, which provides policy guidance for minimizing threats from natural and manmade hazards in the County of Los Angeles, was updated in July 2020. The new plan used the 2016 County of Los Angeles Floodplain Management Plan and 2015 County of Los Angeles General Plan as resources. A copy of the updated plan is available to view at:</p> <p>https://ceo.lacounty.gov/wp-content/uploads/2022/04/County-of-Los-Angeles-All-Hazards-Mitigation-Plan-APPROVED-05-2020.pdf</p> | ✓ |
| Initiative No. 28 — Continue to maintain good standing under the NFIP by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts. | | | |
| Yes | High | The County of Los Angeles continues to maintain and strive to identify activities that meet or exceed NFIP requirements and to help improve the CRS class rating. | ✓ |
| Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|---|----------|---|-----------------------------|
| Initiative No. 29 — Consider the best available data and science to determine probable impacts on all forms of flooding from global climate change when making program enhancements or updates to the County's Floodplain Management Program. | | | |
| Yes | High | <p>Public Works partnered with the United States Department of the Interior Bureau of Reclamation to prepare a study of the Los Angeles Basin in cooperation with local water agencies and nongovernmental organizations to explore long-term water conservation opportunities and flood risk management impacts from climate change within the Los Angeles Basin.</p> <p>The Los Angeles Basin Study looked at the period from 2010 to 2095 and used state-of-the-art climate change and hydrologic modeling to develop projections of future water supply and demands in the region. The study analyzed the major components of the water conservation and flood protection system such as dams, spreading grounds, and major channel outlets. The hydrologic modeling can be used to estimate future flood events and establish trends that could result from projected climate change. The performance of the flood control infrastructure can also be analyzed using the hydrology modeling results from the study and help determine the probable impacts on flooding from climate change.</p> <p>The Los Angeles Basin Study is available online at: https://www.usbr.gov/watersmart/bsp/docs/fy2017/LABasinStudySummaryReport.pdf</p> <p>Public Works also partnered with the University of California Los Angeles to undertake a study to assist Public Works in evaluating the impact of climate change on Los Angeles County Flood Control District infrastructure. This 2-year study began in May 2020 and is close to completion. UCLA identified almost 50 global climate changes and selected some models to downscale to project on a regional scale different scenarios of temperature rise for mid-century and the end of the century.</p> <p>On October 13, 2021, the Los Angeles County Chief Executive Office also released a Climate Vulnerability Assessment which examines the County's social and physical vulnerabilities to climate hazards such as extreme heat, wildfire, and flooding. The assessment is available online at: https://ceo.lacounty.gov/cso-actions/#:~:text=Released%20on%20October%2013%2C%202021,severe%20in%20the%20coming%20decades</p> | O |
| <p>Completion status legend: ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time</p> | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|---|-----------------------------|
| Initiative No. 30 — Identify flood-warning systems for properties where such systems can be beneficially employed. | | | |
| Yes | Medium | <p>The County of Los Angeles has implemented an emergency mass notification system that is used to contact County residents and businesses via recorded phone messages, text messages, or e-mail messages in case of emergency. The system, called ALERT LA County, is used by the County’s Emergency Operations Center to notify residents and businesses of emergencies or critical situations and provide information regarding necessary actions, such as evacuations. The system also utilizes the telephone companies’ 911 database and can contact land-line telephone numbers, whether listed or unlisted. If the call is picked up by an answering machine, the system will leave a recorded message. If the number called is busy or does not answer, the system will redial the number in an attempt to deliver the message. The system is also TTY/TDD compatible.</p> <p>In addition, the National Weather Service sends out mass notifications to impacted communities via Wireless Emergency Alerts (WEA). WEA are emergency messages sent by authorized government authorities through participating mobile carriers. Government partners include local and State public safety agencies, FEMA, the FCC, the Department of Homeland Security, and the National Weather Service. No app or sign-up is required and alerts are sent automatically to WEA-capable phones during emergencies.</p> | ✓ |
| Initiative No. 31 — Consider the development of a comprehensive flood warning and response plan for the unincorporated County that would become a functional annex to the Operational Area Emergency Response Plan and meet the Community Rating System Activity 610 requirements. | | | |
| Yes | High | Public Works will consider the development of a comprehensive flood warning and response plan for the unincorporated County that would become a functional annex to the Operational Area Emergency Response Plan. | X |
| Initiative No. 32 — Continue to enforce the County’s development regulations to prevent increases of the flood hazard on adjacent properties. | | | |
| Yes | High | The County of Los Angeles continues to regulate development in FEMA’s Special Flood Hazard Areas and adopted County Floodplains in unincorporated areas. | ✓ |
| <p>Completion status legend:</p> <ul style="list-style-type: none"> ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

**TABLE 2
ACTION PLAN MATRIX
(REPORTING PERIOD JUNE 15, 2021 – JUNE 14, 2022)**

| Action Taken? (Yes or No) | Priority | Status | Completion Status (X, O, ✓) |
|--|----------|--|-----------------------------|
| Initiative No. 33 — Conduct an evaluation of FEMA-designated flood zones and revise/update them to reflect current conditions. | | | |
| Yes | High | The County of Los Angeles works with FEMA to update the Flood Insurance Rate Maps for several streams. The updates are the result of new Flood Insurance Studies being conducted by FEMA in cooperation with affected cities and the County of Los Angeles. FEMA's Physical Map Revision of Flood Insurance Rate Maps for the Santa Clara River Floodway and Open Pacific Coast became effective in 2021. In addition, Public Works reviews Conditional Letter of Map Revision submittals for projects that may revise/update FEMA designated flood zones. | ✓ |
| Initiative No. 34 — Continue to maintain and update the Hazus-MH model constructed to support the development of the FMP, to make flood risk information available to property owners. | | | |
| Yes | High | The County of Los Angeles continues to update the data used in the Hazus-MH model such as property information and topography. | O |
| Initiative No. 35 — Continue County coordination with other agencies and stakeholders on issues of flood control. | | | |
| Yes | Medium | The County of Los Angeles continues to partner and explore partnership opportunities with other agencies and stakeholders regarding flood control issues. | O |
| Initiative No. 36 — Continue to identify and assess drainage needs. | | | |
| Yes | High | Los Angeles County Public Works' Stormwater Maintenance Division monitors and inspects channels, storm drains, and flood retention basins owned by the Los Angeles County Flood Control District. In addition, Public Works' Land Development Division and Building and Safety Division enforce drainage building code requirements for new construction and alteration projects. | ✓ |
| Initiative No. 37 — Once FEMA establishes its Building Resilient Infrastructure and Communities (BRIC) program, consider updating this plan accordingly to meet the BRIC program guidelines. | | | |
| Yes | Medium | Since the BRIC program has been established, the County of Los Angeles continues to look for opportunities that identify mitigation actions and implement projects that reduce risk posed by natural hazards. | O |
| <p>Completion status legend:</p> <ul style="list-style-type: none"> ✓ = Project Completed, continue to implement as necessary O = Action ongoing toward completion X = No progress at this time | | | |

Recommendations for Changes or Enhancements: Based on the review of this report by the Floodplain Management Plan Steering Committee, the following recommendations will be noted for future updates or revisions to the plan:

- No recommendations for changes or enhancements during this reporting period

PROGRAM FOR PUBLIC INFORMATION IMPLEMENTATION

Summary Overview of Implementation: The annual performance period for the County of Los Angeles’ program for public information is from June 15, 2021, to June 14, 2022, of each year. In the 2021-22 reporting period, all 26 identified outreach projects (100 percent) were implemented. All projects have resulted in progress toward desired outcomes.

The Program for Public Information Committee: The Program for Public Information Committee, made up of stakeholders within the planning area, reviewed and approved this progress report at its annual meeting held on May 10, 2022. It is expected that turnover will occur in Program for Public Information Committee membership from year to year. For this reporting period, the committee membership is as indicated in Table 3.

| TABLE 3. PROGRAM FOR PUBLIC INFORMATION COMMITTEE (JUNE 15, 2021 – JUNE 14, 2022) | |
|--|---|
| Name | Jurisdiction/Agency |
| Patricia Wood | CRS Coordinator, Los Angeles County Public Works |
| Angela Ovalle | Community and Government Relations Group, Los Angeles County Public Works |
| Kari Eskridge | Community and Government Relations Group, Los Angeles County Public Works |
| Debbie Sharpton | Environmental Restoration Group |
| Thomas Hill | American Red Cross, Los Angeles Region |
| Shannon Ggem | Malibou Lake Mountain Club |

Review of the Outreach Projects: Program for Public Information Implementation Status reviews the identified outreach projects, reporting on the following items:

- The target audiences, the messages, and the desired outcomes.
- The projects in the PPI used to convey the messages.
- Which projects were implemented.
- Why some projects were not implemented.
- What progress was made toward the desired outcomes.
- What should be changed.

PROGRAM FOR PUBLIC INFORMATION IMPLEMENTATION STATUS

TOPIC 1: KNOW YOUR FLOOD HAZARD

1. MESSAGE: KNOW YOUR FLOOD ZONE

(www.dpw.lacounty.gov/wmd/floodzone/index.cfm)

Target Audiences:

- Residents, property owners, and businesses in the regulated floodplains
- Renters in flood-prone areas
- Critical facility operators in the regulated floodplains
- Real estate agents, lenders, and insurance agents

Desired Outcomes:

- Increase in hits to Flood Zone Determination website

Progress Toward Outcomes:

- Los Angeles County Flood Zone Determination webpage hits:
June 15, 2021 to June 14, 2022: 13,701
- We created a mobile-friendly version of the Flood Zone Determination website.

a. Project: Mailing of outreach brochure "Are You Prepared for a Flood?" to target audiences

Assignment: Los Angeles County Public Works (Public Works)

Schedule: Annually, prior to rainy season (October)

Stakeholder Delivery (Element STK)¹?: No

Implemented: Yes

Enhancement to project:

- The "Are You Prepared for a Flood?" brochure was updated in 2021.
- To increase the outreach to target audiences, the brochures have been distributed to the following public libraries: Castaic, Lancaster, Malibu, Quartz Hill, Topanga. Additionally, the brochure is distributed to Public Works' Building and Safety Division's plan check counters at headquarters and its field offices.
- Consider distribution of brochures to County Parks and Recreations facilities.
- Consider providing brochure in Spanish and other languages if the demographics demonstrate the need
- Consider providing links or QR codes in brochures to access brochure in other languages

Footnote:

¹ Element STK is a FEMA Community Rating System (CRS) point multiplier that credits project messages delivered or endorsed by stakeholders that are not part of the local government (i.e., Los Angeles County). Stakeholders are the individuals, agencies, and jurisdictions that have a vested interest in the recommendations of this plan, including:

- Community representatives
- Environmental advocacy groups
- Local non-County disaster preparedness and response agencies
- Residents, owners, and operators of businesses within the floodplain
- Repetitive loss area representatives.

- A Gap in Maps analysis was performed to determine homes in close proximity to streams, but where a FEMA or County floodplain has not been mapped; appropriate homes were added to the distribution list for the brochure.
- Public Works provided our web address in the mailers to allow target audiences to download the outreach materials.

b. Project: Social media post for “Are You Prepared for a Flood?” brochure

Assignment: Public Works

Schedule: Annually (October)

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of program
- Consider keeping track of Twitter impressions
- Consider providing brochure to realtor associations (i.e. Board of Realtors)

c. Project: Annual notice of map information services to local realtors/lenders/insurance agents pursuant to the publicity requirements of CRS Activity 320

Assignment: Public Works

Schedule: Annually (October)

Element STK?: Yes

Implemented: Yes

Enhancement to project:

- Mail annual notice to 85 agents in the unincorporated communities and adjacent areas. Consider expanding distribution list to additional agents.

2. MESSAGE: YOU ARE IN A REPETITIVE LOSS AREA

Target Audiences:

- Residents, property owners, and businesses in mapped repetitive loss areas (RLAs)

Desired Outcomes:

- Increase in inquiries to Public Works regarding flood hazards from repetitive loss property (RLP) owners
- Property owners implementing temporary or permanent flood mitigation projects
- Increased demand for sandbags during the storm season

Progress Toward Outcomes:

- Public Works to query its log of calls in the future to determine how many are from repetitive loss areas.
- Conduct field visits to all RLPs within a 5-year period to document any flood mitigation measures.
- In addition, field visits are conducted for all properties in RLAs.
- Public Works submitted the appropriate forms for 4 RLPs and 3 burned structures from the Woolsey Fire for FEMA’s consideration to potentially classify the properties as being mitigated.
- Public Works provides sandbags to the Los Angeles County Fire Department for distribution to residents at over 160 local Fire Stations. Demand for sandbags

varies from year to year. Public Works always maintains over 750,000 sandbags for distribution.

| Year | Sandbags distributed to Fire Department |
|-----------|---|
| 2021-2022 | 42,462 |

a. Project: Annual mailing to Repetitive Loss Area Properties

Assignment: Public Works

Schedule: Annually (October)

Element STK?: No

Implemented: Yes

Enhancement to project:

- In 2021, outreach materials were mailed to all properties within an RLA. If applicable, future mailings can be tailored to areas that may be subject to potential flood hazards, such as postfire debris flows.

TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD

1. MESSAGE: YOU NEED FLOOD INSURANCE

Target Audiences:

- Residents, property owners, and businesses in the 100-year (1 percent annual chance) floodplain
- Homeowners/building owners who do not have a mortgage or federally-backed mortgage

Desired Outcomes:

- Increase in flood insurance policy holders for insurable structures in the 100-year (1 percent annual chance) floodplain

Progress Toward Outcomes:

- Total Policy Holders in Unincorporated LA County:
Date, 2021 945

There can be several factors affecting the increase or decrease over time of policy holders in the unincorporated areas. The fluctuation in the numbers of policies may be the result of several factors including: annexations of unincorporated areas into adjacent cities; and revisions in the Flood Insurance Rate Maps and Letter of Map Revisions that are the result of drainage improvements or corrections to the floodplain boundaries.

- Public Works created a webpage for the new methodology Risk Rating 2.0, which is for federally mandated flood insurance. The new webpage explains the changes in flood insurance premiums and provides answers to frequently asked questions. <https://dpw.lacounty.gov/wmd/NFIP/Risk-Rating/>

a. Project: Mailing to property owners in the flood zones and repetitive loss areas

Assignment: Public Works

Schedule: Annually (October)

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue mailing outreach material to properties in the RLAs and properties in Special Flood Hazard Areas (SFHAs, which may include RLPs). In 2021, outreach materials were mailed to all RLA properties, and 3,224 flood preparedness brochures were mailed to properties in SFHAs, County Floodways, which include areas that may be outside SFHAs, and Gaps in the Maps. Mailing lists are updated accordingly to account for: annexations of unincorporated areas into adjacent cities; and changes in the Flood Insurance Rate Maps (FIRMs) that are the result of Letters of Map Revision (LOMRs), Physical Map Revisions (PMRs), and the Gaps in the Maps Analysis.
- Consider using Twitter to disseminate this message
- Consider keeping track of Twitter impressions

2. **MESSAGE: RENTERS CAN BUY FLOOD INSURANCE**

Target Audiences:

- Renters in flood prone areas

Desired Outcomes:

- Increase in flood insurance purchase by renters in the 100-year (1 percent annual chance) floodplain

Progress Toward Outcomes:

- Specific statistics on flood insurance policies for content-only coverage for renters is not yet available.

a. Project: Mailing to renters in the flood zone

Assignment: Public Works

Schedule: Annually (October)

Element STK?: No

Implemented: Yes

Enhancement to project:

- To reach renters, the flood preparedness brochures are mailed to the site address and the building owner's mailing address. The flood preparedness brochure was updated in 2021 and specifies renters may also purchase flood insurance.
- Consider using a QR code flyer distribution for communities
- Consider visiting residents door-to-door to provide information in person

TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD

1. **MESSAGE: AVOID SWIFT WATER**

Target Audiences:

- People/children who hike or bike through channels and streams
- People who are camping/residing in channels and streams

Desired Outcomes:

- Decrease in swift water rescues
- Decrease in observed camping/residing in the channels and streams

Progress Toward Outcomes:

- The County of Los Angeles Fire Department performs swift water rescues where the need arises.
- Public Works has multiple YouTube videos regarding the flood hazard:
 - o Stormwater safety: <https://www.youtube.com/watch?v=5jFI6Z-Ld4w>

- Swift Water:
<https://www.youtube.com/watch?v=EcOpX7TGY84>
https://www.youtube.com/watch?v=2_oeiOP_o_k
- Storm season evacuation:
https://www.youtube.com/watch?v=gqrr1_o4WYA
<https://www.youtube.com/watch?v=07BHy2Acq-Q>
- Public Works tweets messages urging residents to stay away from rivers and channels during storms.
- Public Works posts messages and videos on Facebook reminding people to steer clear of swift-moving water during storms
- Public Works has created a new GIS system, Homeless Encampment Automated Reporting System (HEARS), to document encampments in the Flood Control District. HEARS allows Stormwater Maintenance crews to submit the information electronically in the field using a smart mobile device. The request is sent to Stormwater Maintenance Division engineers for approval. Upon approval, an email is automatically sent to the Chief Executive Office – Homeless Initiative Office (CEO – HI). CEO-HI routes the request to the Los Angeles Homeless Services Authority (LAHSA) for their public outreach and coordination with the Los Angeles Sheriff’s Department Homeless Outreach Service Team (HOST). LAHSA’s outreach engages the encampment inhabitants and makes them aware of available programs that offer housing, family reconnection, shelters, food, and attaining identification. Following LAHSA’s outreach, Stormwater Maintenance posts a notice that informs the encampment inhabitants that they are trespassing and gives them a 2-week timeframe to move to safety. If necessary, the County Sheriff may assist in the relocation of the encampment inhabitants.
- The 2021 count for People Experiencing Homelessness (PEH) near riverbeds in the County of Los Angeles are below:

| RIVERBED NAME | COUNT OF PEH |
|-----------------------------|--------------|
| Alhambra Wash | 3 |
| Aliso Canyon Wash | 2 |
| Amargosa Creek | 2 |
| Arroyo Seco | 42 |
| Avocado Creek | 2 |
| Ballona Creek | 1 |
| Bell Creek | 1 |
| Big Dalton Wash | 6 |
| Big Tujunga Creek | 3 |
| Browns Canyon Wash | 34 |
| Caballero Creek | 8 |
| Centinela Creek Channel | 3 |
| Central Branch Tujunga Wash | 48 |
| Charter Oak Creek | 3 |
| Chino Creek | 3 |
| Compton Creek | 4 |
| Coyote Creek | 6 |
| Dominguez Channel | 57 |
| East Canyon Channel | 5 |
| Eaton Wash | 14 |
| Eller Slough | 2 |
| Grand Canal | 8 |
| La Canada Verde Creek | 26 |
| La Mirada Creek | 1 |

| RIVERBED NAME | COUNT OF PEH |
|----------------------------------|--------------|
| Leffingwell Creek | 9 |
| Limekiln Canyon Wash | 22 |
| Little Dalton Wash | 7 |
| Little Tujunga Creek | 1 |
| Live Oak Wash | 1 |
| Los Angeles River | 125 |
| Marshall Creek | 1 |
| Meadow Upper Feeder | 1 |
| Medea Creek | 14 |
| Mescal Creek | 1 |
| Newhall Creek | 1 |
| Pacoima Wash | 18 |
| Puente Creek | 9 |
| Rio Hondo | 49 |
| Rubio Wash | 1 |
| San Dimas Wash | 18 |
| San Gabriel River | 80 |
| San Jose Creek Diversion Channel | 9 |
| Santa Anita Wash | 12 |
| Sawpit Wash | 1 |
| Thompson Wash | 12 |
| Tujunga Wash | 11 |
| Verdugo Wash | 1 |
| Walnut Creek | 4 |
| Total | 692 |

Source: [US Census](#), [LA County Assessor \(2020\)](#), [LAHSA HMIS](#).

a. Project: YouTube videos – Public Service Announcements (PSAs) for swift water warning

Assignment: Public Works

Schedule: Year-round on YouTube

Element STK?: No

Implemented: Yes

Enhancement to project:

- Consider posting YouTube videos on social media

b. Project: Social media reminder

Assignment: Public Works

Schedule: Prior to and during rainy season, and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program
- Continued use of Facebook to reach residents and business owners of County of Los Angeles
- Added Facebook and Instagram reminders to reach younger audience
- Consider keeping track of Twitter impressions

2. MESSAGE: TURN AROUND DON'T DROWN

Target Audiences:

- Motorists

Desired Outcomes:

- Decrease in swift water rescues

Progress Toward Outcomes:

- Public Works actively uses social media to send messages urging residents to avoid driving or walking through flood waters during storms.

a. Project: Social media reminder

Assignment: Public Works

Schedule: Prior to and during rainy season, and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program
- Exploring the feasibility of providing tweets in Spanish
- Consider keeping track of Twitter impressions

3. MESSAGE: BE AWARE OF HAZARDOUS ROAD CONDITIONS

Target Audiences:

- Motorists

Desired Outcomes:

- Increase in hits to Los Angeles County's road closure website
- Decrease in swift water rescues

Progress Toward Outcomes:

- Public Works actively uses social media to send messages informing residents to be aware of hazardous road conditions.
- Los Angeles County road closure website hits:
June 15, 2021 to June 14, 2022: 253,244

a. Project: Social media reminder

Assignment: Public Works

Schedule: Prior to and during rainy season, and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of program
- Consider keeping track of Twitter impressions

4. MESSAGE: DO NOT CAMP OR RESIDE IN WATERWAYS

Target Audiences:

- People who are camping/residing in channels and streams

Desired Outcomes:

- Decrease in swift water rescues
- Decrease in observed camping/residing in the channels and streams

Progress Toward Outcomes:

- Public Works Stormwater Maintenance Division coordinates with LAHSA for potential areas where people reside in channels and streams

a. Project: Targeted outreach prior to flood season or major storms

Assignment: Los Angeles Homeless Services Authority (LAHSA), Public Works
Schedule: Year Round
Element STK?: No
Implemented: Yes
Enhancement to project:
- Continue implementation of program

TOPIC 4: PROTECT YOUR PROPERTY FROM THE FLOOD HAZARD

1. **MESSAGE: NEED ADVICE FOR PROTECTING YOUR PROPERTY FROM FLOOD HAZARDS? PLEASE CALL US OR VISIT OUR WEBSITE**

Target Audiences:

- Residents, property owners, and businesses in the regulated floodplains and in repetitive loss areas
- Environmental consultants/building contractors or others involved in the permitting process
- Gaps in the Maps identified properties
- Lake Los Angeles property owners with creeks on their properties
- Property owners near recently burned areas

Desired Outcomes:

- Increase in requests for advice/assistance

Progress Toward Outcomes:

- Storm Season Preparation YouTube video:
<https://www.youtube.com/watch?v=GELAxD7hzIU>
- Public Works provided Post-Burn Engineering Advice to residents in post burn areas on how to mitigate debris flow impacts on their properties:

| Year | No. Advice |
|------|------------|
| 2020 | 128 |
| 2021 | 0 |

There were no fires in proximity to homes in Los Angeles County from June 15, 2021, to June 14, 2022.

Public Works maintains over 750,000 sandbags at its warehouse for emergencies, and during storm season provides Los Angeles County Fire Stations with an adequate supply for the public. There was no advice given in 2021 because there were no major fire events in that year.

- During Repetitive Loss Property site visits, observed mitigation measures were documented. Public Works submitted the appropriate forms for 4 RLPs and 3 burned structures from the Woolsey Fire for FEMA's consideration to potentially classify the properties as being mitigated.

a. Project: YouTube video storm season preparation

Assignment: Public Works
Schedule: Available year-round online
Element STK?: No
Implemented: Yes
Enhancement to project:
- Continue implementation of program

b. Project: Twitter reminder

Assignment: Public Works

Schedule: Prior to and during rainy season

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of program
- Consider keeping track of Twitter impressions

c. Project: Distribute mailer to affected properties

Assignment: Public Works

Schedule: Prior to and during rainy season and as needed

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program. Currently, owners and residents of properties within a SFHA or County floodway receive a flood preparedness brochure. In addition, owners and residents of properties within RLAs receive a letter that contains extensive resources with information on ways to mitigate flood hazard on their properties.
- Consider distributing brochures during the County's Household Hazardous Waste Collection events

d. Project: Facebook message

Assignment: Public Works

Schedule: Prior to and during rainy season

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of program

2. MESSAGE: SANDBAGS AVAILABLE

Target Audiences:

- Residents, property owners, and businesses in the recently burned areas, regulated floodplains, and in repetitive loss areas

Desired Outcomes:

- Increase in demand for sandbags during the storm season

Progress Toward Outcomes:

- Public Works actively uses social media to send messages informing residents on fire department locations for free sandbag distribution
- Consider providing information on how to properly dispose of sandbags

a. Project: Social Media Message

Assignment: Public Works

Schedule: Prior to rainy season, and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of program
- Consider keeping track of Twitter impressions

TOPIC 5: BUILD RESPONSIBLY

1. **MESSAGE: A LITTLE INVESTMENT NOW COULD SAVE YOU MONEY LATER**

Target Audiences:

- Environmental consultants/building contractors or others involved in the permitting process.
- Homeowners applying for permits

Desired Outcomes:

- Increase protection of structures from flood hazards

Progress Toward Outcomes:

- Public Works' current Building and Safety and Land Development plan checking procedures enforce flood protection requirements.

a. Project: Promote on social media (Twitter) and NFIP website

Assignment: Public Works

Schedule: Year-round; revisions to website by October

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue to provide at Public Works' Building and Safety permit counters booklets and FEMA flyers about proper construction
- Consider providing this information to organizations (e.g. local chapter of the American Institute of Architects) that would benefit from it during the planning phase
- Consider providing recommendations during the building process to construct above minimum flood protection requirements

TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS

1. **MESSAGE: NO DUMPING**

Target Audiences:

- Countywide
- Areas where there are significant instances of illegal dumping into storm drains, channels, and flood control basins

Desired Outcomes:

- A reduction of illegal dumping instances

Progress Toward Outcomes:

- Public Works added a link to the County's National Flood Insurance Program's Resources and Links webpage to report illegal dumping.
- Public Works' YouTube channel has public service announcements featuring athletes from the Los Angeles Dodgers and Clippers to encourage residents to "Keep it classy, not trashy".

- PSA – Illegal Dumping with Dodgers Adrian Gonzalez:
<https://youtu.be/YabWhMjklkw>
- PSA – Illegal Dumping with Clippers Lamond Murray
<https://youtu.be/DRO77wc0ric>
- Number of illicit discharges to which the Los Angeles Flood Control District responded:
Fiscal Year 2020 - 2021: 121
- Number illegal dumping reported to Public Works countywide:
Fiscal Year 2021 - 2022: 16,757
- In an effort to educate the public and promote behavioral change to prevent stormwater pollution, Public Works implements the Public Information and Participation Program that addresses water quality priorities and stormwater management program priorities. In addition, Public Works continues water education through their Water for LA (www.WaterForLA.com) platform, to provide trusted information to the residents of LA County and inspire them to reevaluate their relationship with water. As part of the Water for LA countywide water educational program, Public Works conducts social media and email outreach to residents and businesses across LA County and implements paid media outreach campaigns consisting of digital display, video, radio, print and out-of-home ads. Stormwater pollution prevention topics included instructions for properly disposing of household hazardous waste as well as tips on how to reduce pollutants such as pesticides, litter, and other common household chemicals. Other ongoing outreach efforts include:
 - School education outreach programs, Environmental Defenders (K-5th grade) and Generation Earth (6-12th grade)
 - Used Motor Oil and Oil Filter Campaign
 - Household Hazardous and Electronic Waste Program
 - Smart Gardening Program

a. Project: Drains to Ocean signage/No Dumping signage

Assignment: Public Works

Schedule: Signs posted year-round at LACFCD facilities

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program

b. Project: YouTube Video

Assignment: Public Works

Schedule: Available year-round online

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program

TOPIC 7: GENERAL PREPAREDNESS

1. MESSAGE: SIGN UP FOR ALERT LA

Target Audiences:

- Countywide
- Residents, property owners, and businesses in the regulated floodplains
- School Districts

Desired Outcomes:

- Increase the number of residents who register their mobile device numbers for Alert LA

Progress Toward Outcomes:

- The number of enrollments for Alert LA County:
June 15, 2021 to June 14, 2022: 3,222
- The County of Los Angeles' website for storm preparation promotes residents to sign up for Alert LA and provides resources for preparation such as weather forecast, videos, guides, notifications, and tweets.
<http://www.lacounty.gov/larain>

a. Project: Promote Alert LA on County Website

Assignment: Public Works, Los Angeles County Sheriff's Department

Schedule: Available online year round

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program

b. Project: Provide Alert LA County Brochure

Assignment: OEM

Schedule: Available online year round

Element STK?: No

Implemented: Yes

Enhancement to project:

- Included language promoting Alert LA in the flood preparedness brochure
- Continue implementation of the program

c. Project: Promote on social media

Assignment: Public Works

Schedule: Annually

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program

2. MESSAGE: DEVELOP A FAMILY DISASTER PLAN

Target Audiences:

- Countywide
- Residents, property owners, and businesses in the regulated floodplains
- School Districts

Desired Outcomes:

- Increase preparedness by residents

Progress Toward Outcomes:

- In addition to OEM's website, the County of Los Angeles' website for emergency preparation provides residents with resources, tips, and facts to equip and alert them on how to best respond to emergencies and recover from disasters.
<http://www.lacounty.gov/emergency>
<https://ready.lacounty.gov/>

a. Project: Promote on social media (Twitter) and website

Assignment: Public Works

Schedule: Quarterly, during rainy season and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program
- Consider keeping track of Twitter impressions

3. MESSAGE: KNOW YOUR RISK

Target Audiences:

- Countywide
- Residents, property owners, and businesses in the regulated floodplains
- School Districts

Desired Outcomes:

- Increase visits to the Flood Zone Determination Website

Progress Towards Outcomes:

- Los Angeles County Flood Zone Determination webpage hits:
June 15, 2021 to June 14, 2022: 13,701

a. Project: Mailer to all properties with structures in the floodplain

Assignment: Public Works

Schedule: Annual Mailing (October)

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program

b. Project: Promote on social media (Twitter)

Assignment: Public Works

Schedule: Annually

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program
- Consider keeping track of Twitter impressions

4. MESSAGE: BE AWARE, #LARAIN IS COMING

Target Audiences:

- Countywide
- Residents, property owners, and businesses in the regulated floodplains
- School Districts

Desired Outcomes:

- Increase awareness of incoming storms

Progress Towards Outcomes:

- The County of Los Angeles tweets forecasts such as flood advisory, flash flood warnings and flood-related information from the National Weather Service Los Angeles.

a. Project: Twitter reminder

Assignment: Public Works, National Weather Service Los Angeles

Schedule: During rainy season and during a flood response

Element STK?: No

Implemented: Yes

Enhancement to project:

- Continue implementation of the program
- Consider keeping track of Twitter impressions

Recommendations for Changes or Enhancements: Based on the review of this report by the Program for Public Information Committee, the following changes will be incorporated during the next performance period:

- Consider keeping track of Twitter impressions, which is a tally of the number times a tweet has been seen
- Consider distribution of outreach material to additional County facilities such as County Parks and Recreations facilities
- Consider using QR codes on flyers to communities to help disseminate flood zone information
- Consider providing brochures and flood information in different languages

PUBLIC REVIEW NOTICE

The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the County Los Angeles Chief Executive Office and to local media outlets and the report is posted on the Floodplain Management Plan website. Any questions or comments regarding the contents of this report should be directed to:

*Los Angeles County Public Works
Stormwater Engineering Division
(626) 458-6131*