



Zone 7, Alameda County Flood Control and Water Conservation District

Flood Control Program

2011 Annual Report

May 2012

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OVERVIEW

Zone 7 of Alameda County Flood Control & Water Conservation District was established in 1957 by the voters of the Livermore-Amador Valley in order to place under local control, through a locally elected Board of Directors, the vital matters of flood protection and water resource management in eastern Alameda County. In addition to providing whole sale potable water supply and groundwater basin management for the Livermore-Amador Valley, Zone 7 provides for the management of flood and storm waters in order to protect life, property, and habitat from damage and destruction within a 430 square-mile area.

Zone 7's Flood Control Program includes three major sub-programs; Administration, Capital Improvement, and Operation and Maintenance of 37 miles of Zone 7 owned channel facilities. Administration includes staffing and training, legal, safety, property management, compliance with regulations, and public outreach. The key capital improvement and expansion activities include planning, data collection, hydrologic and hydraulic modeling, financing and budgeting, design and construction management of capital projects, and working with other entities such as developers, Cities, NGOs to further partnerships on projects identified in the Stream Management Master Plan (SMMP). The key operations and maintenance activities include emergency repairs, routine maintenance and repairs, clearing debris from channels and access roads, vegetation management along the channels, inspections to ensure the system is in good working condition to receive and pass storm waters, and rehabilitation of existing facilities.

Zone 7 also administered a mini-grant pilot program to assist local landowners in furthering the goals of the SMMP for private property work. Staff served as Chair of two multi-agency working groups that support environmental studies and collaboration in the Alameda Creek watershed. Zone 7 participated in a collaborative effort involving the Natural Resources Conservation Service and the Alameda County Resource Conservation District to support bank stabilization projects on the SFPUC owned portion of the Arroyo de la Laguna.

The following sections provide additional details of these sub-programs and describe some of the 2011 major activities.

ADMINISTRATION

In 2011, the Flood Control Program related administrative tasks included staffing, planning, budget preparation, preparing board agendas and presentations, updating and managing current agreements and contracts, and issuing permits as appropriate. Flood Control staff coordinated extensively with other agencies to minimize impacts to the public and utilize Zone 7 owned properties for other compatible community uses such as trails. In addition, Flood Control staff routinely engaged with the public to address citizen complaints and inquiries.

Following is a description of the key administrative activities:

Mitigation Monitoring and Reporting Program

A typical Zone 7 Flood Control capital improvement project usually does not end after the construction is completed. Typically, a project requires an ongoing effort to monitor and mitigate impacts resulting from a project. As a requirement for project approval, Zone 7 must provide a mitigation and monitoring report to various regulatory agencies, such as the Department of Fish and Game, Regional Water Quality Control Board, Army Corps of Engineers and U.S. Fish and Wildlife Services, for a period of three to five years after project completion, to show that the mitigation for the improvements are doing what they were intended to do. In 2011, Zone 7 continued their project requirement for providing a mitigation and monitoring report for the Granada High Crossing Removal Project in Livermore, which was completed in 2008. The Granada High Crossing Removal Project served as mitigation for a sediment removal project that occurred downstream along the Arroyo Mocho stream. Zone 7 was required to monitor the channel crossing location for a period of five years, to insure that removal of the crossing did not affect the channel integrity. Zone 7 administered a consultant contract with Environmental Science Associates to assist with the mitigation monitoring and reporting process. 2011 was the fourth year of the required five-year mitigation monitoring and reporting work for the Granada High Crossing Removal Project in the Arroyo Mocho. Regulatory agencies have accepted our 2011 report.

Contract/Agreement Administration and Management

Flood Control staff is responsible for administering and managing various consultant and vendor contracts related to Flood Control projects. It includes the preparation and administration of requests for proposals, contracts, and right-of-way documents. Staff is also responsible for preparing Zone 7 Board Agenda items pertaining to Flood Control.

Flood Control staff routinely receives requests from private entities, as well as public agencies, regarding use of a Flood Control facility for their projects. While temporary access is usually granted through Encroachment Permits, long-term access is usually provided, when warranted, through a License Agreement. A License Agreement will generally spell out the terms of operating within a Zone 7 facility, as well as indemnify Zone 7 from any liabilities that may occur from that entity use of the property.

In 2011, Zone 7 Flood Control staff worked on several requests with developers and performed a number of requests for proposals, annual purchase orders, consultant contracts, and construction contract administration. A lease agreement with a private entity leasing Zone 7 property was updated to reflect current terms and conditions.

Technical Support to Claims/Lawsuits against Zone 7 & Zone 7's Claims against Others

Claims are typically processed by the Alameda County Risk Management Agency. However, in assisting the County Risk Management in 2011, Zone 7 staff continued to provide technical support in one case (cracked pool; claim amount \$15,795).

Encroachment Permit Program

The Encroachment Permit Program involves engineering design review, inspection, and issuance of encroachment permits. Encroachment permits are necessary when adjacent neighbors request use of Zone 7's access roads to work within their property, or when work is proposed within the public right-of-way or easement. They involve developing permit terms, conditions, fees, insurance and bond requirements. In the past twelve months, Flood Control Staff issued 27 permits to both private and public agencies and coordinated with applicants to provide safe access to Zone 7 facilities. See Appendix A for a list of Encroachment Permits issued in 2011.

U.S. Army Corps of Engineers PL84-99 Federal Assistance Program

In the past, Zone 7 has participated in the U.S. Army Corps of Engineers (COE) PL84-99 Federal Assistance Program. The program provides funding for Presidential declared storm related disasters to complete and rehabilitate damaged facilities. One of the conditions required to participate in the program is a bi-annual eligibility inspection conducted by the Army Corps inspectors on all Zone 7 facilities. In 2011, Zone 7 continued working with the COE to maintain its eligibility in the program.

Trail-Use Collaboration and Support

In 2011, Flood Control staff collaborated with City of Pleasanton, City of Livermore, City of Dublin, East Bay Regional Park District and local trail groups to make sure that the trail-use and license agreement terms and conditions were up-to-date and reflect current concerns. In addition to our review on the feasibility study for the Iron Horse Trail Extension Project in Pleasanton and our continual collaboration on the I-580 undercrossing with the East Bay Regional Park District, staff coordinated with City of Livermore staff in the installation of a pedestrian bridge over the Arroyo las Positas Fish Ladder in the El Charro area as a part of the future Pleasanton-Livermore

trail connection. As incidents relating to trail-use occurred, Flood Control staff worked with the public to ensure safety as a number one priority.

Alameda County Clean Water Program

In 2011, Flood Control participated in the Alameda Countywide Clean Water Program by implementing Best Management Practices in its maintenance activities, responding to illicit discharges, and contributing data for the Clean Water Program semi-annual reports. Per the Clean Water Program requirement, staff kept track of violations such as shopping carts, debris, and spills in the channels and prepared reports for the Clean Water Program. By staying proactive and prepared for action when violations arose, Zone 7 was able to effectively reduce the amount of runoff pollution. Flood Control Staff supported and collaborated with the Cities of Livermore and Pleasanton and Caltrans staff in two separate cleanup efforts on homeless encampments. Zone 7 also participated in Earth Day 2011, Coastal Clean-Up Day and Dublin Pride Week activities.

Response to Citizen Complaints and Inquiries

Zone 7 recognizes the importance of public concern over flood control activities. In 2011, Flood Control Staff documented, responded to, and investigated 80 complaints and inquiries. Typical inquiries included trail user complaints over graffiti and illegal dumping (i.e., shopping carts, tires, sofa, mattress, etc.), complaints about downed branches and untrimmed vegetation on Zone 7's property, neighbors' complaints of cracked or leaning walls/fences adjacent to channels, and neighbors' complaints of dust and vibration generated by moving equipment. By working calmly and reasonably with residents, Flood Control staff was able to resolve many of their concerns while educating them about flood control activities. See Appendix B for a list of complaints and inquiries which occurred in 2011.



December 2011:
Flood Control staff
responded to a
neighbor's complaint
about a Mattress
obstructing flood flow
in Arroyo del Valle in
Pleasanton.

Joint Exercise of Powers Agreement for Aquatic Pesticides NPDES Permit

In compliance with the statewide General National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of aquatic pesticides to waters of the United States, Zone 7 entered into a Joint Exercise of Powers Agreement (JEPA) in 2003 with Contra Costa County Public Works Department, Contra Costa County Flood Control and Water Conservation District, Alameda County Public Works Agency, City of Antioch and City of Concord to monitor and implement aquatic pesticide use. Flood Control Staff is responsible for attending all meetings and contract agreements with the selected consultant. All JEPA member agencies share equally in the costs of monitoring and testing for each pesticide being used and for the costs associated with coordination and administration of the JEPA. With the NPDES permit, Zone 7 will be in compliance when aquatic pesticide is used for keep flood control channels clear of invasive vegetation.

Environmental Studies and Collaboration

Zone 7 staff currently serves as Chair of two multi-agency working groups that support environmental studies and collaboration in the watershed.

Alameda Creek Fisheries Restoration Workgroup

The Alameda Creek Fisheries Restoration Workgroup was formed in early 1999 as a collaborative effort among many parties focusing on water flows and habitat restoration in the Alameda Creek watershed to support steelhead trout. A Memorandum of Understanding (MOU)

was authorized by the seventeen Workgroup members in 2006, and Zone 7 is one of five funding partners.

A comprehensive study plan, the “Alameda Creek Population Recovery Strategies and In stream Flow Assessment for Steelhead Trout,” was completed in 2008. Current and future work included an assessment of hydrologic and habitat conditions, and identification of strategies for population recovery.

Meetings are held quarterly and are open to the public.

These efforts are in addition to our collaborative approach with the National Marine Fisheries Service on their preparation of a Recovery Plan for Central California Coast Steelhead.

Alameda Creek Watershed Council

The Alameda Creek Watershed Council consists of representatives from several local agencies, environmental groups, industries and organizations. The Council’s mission is to protect and enhance water-related beneficial uses and resources in the Alameda Creek Watershed in order to create a healthy and sustainable watershed for the community. The Council promotes collaboration and the sharing of information among all stakeholders.

The popular annual conference is held each year in October, and regular meetings are held approximately quarterly. They are open to the public.

Employee Development and Staff Training

In 2011, Flood Control staff had the opportunity to participate in a number of training classes to improve staff productivity and employee development. Classes included Civil 3D, AutoCAD Map 3D mapping software, hydrology and hydraulic modeling programs, HAZWOPER 8-hr. refresher on hazardous materials handling, GIS seminars, and stream bank assessment and restoration training. With increased knowledge of these new programs, Flood Control staff was able to accomplish daily tasks, as well as new assignments, with greater safety and efficiency.

CAPITAL PROJECTS

The Flood Control staff administers the Stream Management Master Plan (SMMP) and its lone funding source, the Development Impact Fee (DIF). Staff is involved with the planning and update of both programs, working alongside the Integrated Planning Group. Staff is responsible for providing technical background analyses, such as Hydrologic and Hydraulic modeling to support potential projects. In addition staff participates in the Development Referral Program and provides feedback to local Agencies and Developers regarding projects or developments within the purview of Zone 7's Flood Control.

Stream Management Master Plan (SMMP)

In August 2006, the Zone 7 Board adopted a new Flood Control Master Plan, the SMMP. The SMMP proposes to implement 45 individual multi-benefit projects selected strategically throughout the Livermore-Amador Valley, while focusing mainly on Regional Storage of flood and storm waters within the Chain of Lakes. The SMMP also focuses on achieving project goals by being environmentally friendly toward habitats and the environment and forming partnerships with related Agencies.

Staff continues to develop the implementation plan for the SMMP. The implementation plan will prioritize projects and identify a financial plan that the community can support. Through partnerships with various environmental groups and regulatory and local agencies, the implementation plan will address the community's concerns of impacts to the environment as well as costs. While the SMMP currently collects DIF for the creation of new impervious surfaces in developments, additional sources of funding are necessary to implement the SMMP in whole.

In preparation for updating both the SMMP and DIF, staff began evaluating the studies performed to date on the SMMP, which led to the decision to develop valley-wide hydrologic and hydraulic models. Hydrologic and hydraulic modeling of Zone 7's watershed area is necessary to clarify the priorities for the proposed SMMP projects. Rather than have consultants perform the work, staff within Flood Control and Integrated Planning were tasked with creating working Hydrologic and Hydraulic models of the Zone 7 watershed. In 2011, staff focused its efforts in putting together a Hydrologic model that best represents the existing conditions of the Livermore-Amador Valley watershed, utilizing City and County General Plans (for land use information), soil parameter data, rainfall data, and stream gage data to calibrate to historic storm events. In parallel, Zone 7 staff is also developing a hydraulic model representing the flood control system (channels, culverts, bridges etc.). Both of these models are scheduled to be completed by mid-2012.

Also as a part of examining the SMMP and other stream related work efforts, Staff consulted with other flood control agencies in the region and the Urban Creeks Council (UCC) to identify ways to better integrate environmental elements into the SMMP/DIF project costs. Staff determined that specific and targeted environmental studies and plans would help streamline the CEQA, permitting, and mitigation of future projects.

In particular, Staff concluded that three study elements should be pursued initially to begin addressing concerns raised by stakeholders and to fill identified data gaps for completing the SMMP/DIF update:

- Frame SMMP projects within a larger ecosystem context. This will facilitate project selection and prioritization, guide project design, and provide an overall context for regulatory agencies so that projects are not perceived as “one-offs” but rather as contributing to an overall goal of improving environmental conditions.
- Identify potential mitigation needs and opportunities in advance. This will facilitate project planning and budgeting, and along with the preceding item will help foster the understanding within the regulatory agencies that environmental protection and enhancement is a key goal of the SMMP.
- Develop a maintenance plan that will lessen the need for mitigation when routine maintenance (such as de-silting) must be carried out.

In early 2011, Staff began discussions with the State Coastal Conservancy (Conservancy) to explore the Conservancy’s willingness to help fund a revision of the SMMP. The Conservancy invited a proposal, which was jointly produced by Staff and Urban Creeks Council, submitted in July 2011. The grant request was approved in the amount of \$190,000 by the Conservancy’s board in November 2011.

Zone 7 also continued meeting with the newly formed Arroyo De La Laguna Collaborative, comprised of agencies and municipalities draining into the arroyo and Alameda Creek. This collaborative is discussing the arroyo as a whole to better understand the scientific and engineering data that are available along with what goals for the arroyo will benefit the stakeholders and local residents.

Since 2009, Zone 7 has participated in a collaborative effort involving local, state and federal agencies, organizations, landowners and special interest groups, which employed various bank stabilization processes designed by the Natural Resources Conservation Service (NRCS) and administered by the Alameda County Resource Conservation District (RCD). This was a unique project that leveraged over a million federal dollars with local matching dollars to support several bank stabilization projects on the San Francisco Public Utilities Commission owned portion of the Arroyo de la Laguna – an area that suffers from severe bank erosion. Now at the project’s conclusion, the RCD and NRCS will develop, install, and maintain a public signage display on the Verona Bridge over Arroyo de la Laguna to commemorate this successful collaborative project, and to help educate the public about the project and the watershed.

The flood control program continues to coordinate with the Bay Area Flood Protection Agencies Association (BAFPAA) and the Integrated Regional Water Management Plan group (IRWMP) regarding collaboration opportunities and grant funding options.

Projects and Activities within the Watershed

One project identified in the SMMP was advanced under a pilot program in April 2011. Project R.3-5 (now known as 'Stanley Reach') was identified as an area where stream channel enhancements, increased riparian vegetation, and fish passage improvements could be made without impacting the 100-year storm flow capacity. The project also identified this area as a location that is of interest for inclusion in the City of Livermore's trail system. This reach of the Arroyo Mocho runs roughly east-west along Stanley Boulevard between Murrieta Boulevard and Isabel Avenue in the City of Livermore. Design continues on the project reach with construction anticipated in 2013.

In 2011, Zone 7 also finalized a Partnership Agreement with the City of Livermore for flood protection improvements within the El Charro Specific Plan Area and the Las Positas Golf Course. The Partnership Agreement appropriated \$10 million to the City to facilitate the construction of flood protection improvements, as well as provide easements for several City-owned properties that are integral to providing Flood Protection and water management benefits to the community in the future. The El Charro Specific Plan includes flood protection improvements that are intended to function in conjunction with the regional flood control system and remove certain developable parcels from the floodplain. The City and Zone 7 have collaborated to integrate the SMMP and the El Charro Specific Plan. When fully implemented, the SMMP proposes to divert flood flows from the Arroyo Las Positas in the El Charro Specific Plan area into the Chain of Lakes for storm water detention. Construction within the El Charro Specific Plan Area and Las Positas Golf Course began in the summer of 2011. Two of the major flood protection improvements, the Southern Conveyance Facility and Golf Course berms, were mostly completed by November 2011. In December 2011, the City conveyed to Zone 7 the specific easements identified in the Partnership Agreement. Construction will continue through 2012.

Zone 7 also continued discussions with the City of Pleasanton with regards to the extension of Stoneridge Drive into Staples Ranch. The extension requires a bridge over the Arroyo Mocho. While the design of the bridge did impede Zone 7's existing access along our maintenance access roads, the City did include some less desirable access points to get around the bridge structure. Initial grading of the Staples Ranch area began in the latter half of 2011 with bridge work to begin in April 2012.

Work continued on the Arroyo de la Laguna (ADLL) in Pleasanton near Verona Bridge. Staff completed an initial study of design options to explore solutions to the erosion and sedimentation challenges faced by properties along this stream corridor. This reach has experienced extreme erosion in the past decade and was selected for this pilot program in 2009. The study included a Watershed Assessment of River Stability & Sediment Supply (WARSSS) analysis and report, which follows an EPA protocol for stream assessment. In 2011, the necessary 'validation of data' was completed during the summer and added as an addendum to the report. The data collection and validation shows that the reach may be contributing up to 130,000 cubic feet of sediment annually to the system and that erosion rates could extend up to 10 feet per year in some extreme areas.

Beginning in 2010/11 winter, Zone 7 undertook a sediment study to better understand the magnitude of the sediment transport process within the upper Alameda Creek watershed area. Understanding the way the system moves and deposits sediment will allow Zone 7 to develop a more environmentally sound and cost effective maintenance plan to reduce flooding risks from sediment buildup that can decrease stormwater carrying capacity in some areas. It will help Zone 7 clarify the need, location, size and maintenance frequency of sedimentation basins and other facilities used for stormwater detention during the SMMP updating process. Furthermore, it will provide basic data on sediment flows affecting various riparian habitats. Flood Control Staff works with San Francisco Estuary Institute staff in this endeavor.

Flood Control staff continued to answer questions related to the Development Impact Fee and interpretation of its Ordinance. Staff continued to evaluate Developer's projects to determine when and if fees are applicable or not.

Development Referral Review Program

The Development Referral Program is an interagency program designed to keep Public Agencies abreast of public projects and private developments that may have an impact on an Agency's facilities or operations. Staff reviews and evaluates other Public Agencies' and private parties' development plans and inquiries, environmental documents (CEQA), master plans, improvement plans, and engineering studies, as they relate to impacts to Zone 7 Flood Control facilities and/or proposed projects identified in the SMMP. In 2011, the Flood Control Section conducted 25 reviews. Typical reviews included evaluating the impact of the widening of I-580 westbound from San Ramon Road to Tassajara Road to Zone 7 facilities as well as looking at the impact of the expansion of the Cornerstone Fellowship parking lot which is in close proximity to a flood control facility.

FLOOD CONTROL MAINTENANCE

Zone 7 owns and maintains approximately 37 miles of improved channels throughout the Livermore-Amador Valley. Maintenance is one of Flood Control's highest priorities and involves routine, major, and emergency maintenance and repair of Zone 7's flood protection facilities. Such activities are directed toward preventing minor problems from becoming major flooding problems, minimizing unnecessary damage to private property through proactive planning, preserving and maximizing flood carrying capacity of existing creeks and channels, and post-storm rehabilitation of flood control facilities damaged in storms.

To implement the various maintenance projects, Flood Control staff is responsible for all aspects of the project, including program management, planning, scheduling, CEQA compliance, permit acquisition, surveying, design, cost estimates, construction management, inspection, as-built updates, and base-map updates.

Following is a description of the key maintenance activities:

Annual Maintenance/Repair Program

In 2011, Flood Control staff identified, planned, designed and managed construction of 22 repair projects within Zone 7's Flood Control facilities. Repair projects included channel bank repairs, road and drainage improvements, concrete channel lining repairs, and outfall structure repairs. There were a total of 19 channel bank repairs totaling 1,361 linear feet; 11 road and drainage improvement projects for a total of 1,198 linear feet of road work; and 565 linear feet of concrete channel lining and outfall structure repairs. The majority of construction repairs were performed through a time and material contract with Fanfa, Inc. The total material and contractor payments for these repairs were approximately \$1 million. The following highlights a few of the key projects implemented under this year's FANFA contract:

Pleasanton Canal (Line B-5) Bank Repair/Stabilization - Project #681

Construction Cost: \$69,423.30

Construction Duration: 20 Days (6/13/11 – 7/11/11)

Description: The Pleasanton Canal bank repair project was a large scale job which intended to permanently repair a section of the Pleasanton Canal bank.

This bank slide encroached into the neighbor's yard & threatened his residence.



March 2011:
A major channel
bank slide occurs
on Pleasanton
Canal in
Pleasanton. The
slide encroaches
into a neighbor's
yard.



Alamo Canal (Line F) Channel Bank and Trail Repair – Project #673

Construction Cost: \$63,962.92

Construction Duration: 13 days (8/1/11 – 8/17/11)

Description: This project was located on the Alamo Canal in Pleasanton adjacent to the DSRSD treatment plant across from Highway 680. This bank slide threatened the Centennial Trail and a 20" sewer main owned by the City of Pleasanton.



January
2011:
A bank
slide is
found on
the Alamo
Canal after
a rain
storm
threatening
the trail.



August 2011:
Completed
Work

Chabot Canal (Line G-1) Bank and Outfall Repair Project – Projects # 687/688

Construction Cost: \$197,502.22

Construction Duration: 39 days (8/16/11 - 10/14/11)

This project was located on the Chabot Canal in Pleasanton and was the largest project we completed in 2011. This project included two storm drains and one concrete outfall replacement



March 2011:
Two individual
bank slides were
found during
storm inspection
on Chabot Canal.



Repair underway



September 2011:
Completed work including
hydroseeding.

Vegetation Management Program

In 2011, Flood Control staff administered the Vegetation Management Program which cleared obstructive vegetation such as weeds and tall grasses that may affect the flow of water in channels, vehicle access along channel access roads, and pedestrian access on local trails. The Program also aimed to reduce the fire fuel loads per the requirements of the local Fire Marshalls. In addition, herbicides are used to inhibit the growth of obstructive vegetation and control weed growth

With the exception of clearing vegetation for annual maintenance/repair projects by staff, the majority of vegetation clearing is handled through various maintenance contractors under annual service contracts. Flood Control staff utilizes the following support crews to assist with such maintenance activities: Alameda County Public Works Agency, California Conservation Corps, East Bay Conservation Corps, Splash of Class (formerly known as Pacheco Brothers Gardening), and Bruce Balala Mowing.

Contract with Alameda County Public Works Agency - \$400,000

Flood Control staff utilized the labor from Alameda County Public Works Agency to address routine maintenance activities within our facilities. Such activities include spraying of maintenance roadways, control of broad leaves and aquatic vegetation within the facilities. This contract is also used for graffiti removal, cleaning debris from drainage inlets, repairing

concrete v- ditches and conducting minor desilting on existing structures. The services are performed under the direction of Zone 7 staff expertise.



County crews spray for aquatic vegetation along Alamo Canal in Pleasanton.

Contract with Bruce Balala Mowing - \$50,000

Flood control staff administered an annual contract with Bruce Balala Mowing for mowing all 37 miles of Zone 7 channels in the spring. The mowing involved cutting tall weeds and grasses along channel embankments (sometimes on both sides of the channel) to meet the Local Fire Marshal's requirements for lowering fire hazard.



Bruce Balala mows the grass per Fire Dept.'s Request on Line K in Pleasanton

Contracts with California Conservation Corp (CCC) and East Bay Conservation Corp (EBCC) - \$25,000 each

This annual contract with the CCC and EBCC involves labor crew usage for projects requiring manual labor such as biotech bank stabilization projects, concrete v-ditch cleaning and vegetation clearing. In 2011, there were six biotech bank stabilization projects performed along Alamo Creek in Dublin.

Contract with Splash of Class (Formerly known as Pacheco Brothers Gardening, Inc.), Landscape Contractor - \$25,000

Flood Control uses this annual contract for more specific vegetation maintenance, such as tree trimming to ensure adequate vehicle clearance, removal of broken tree limbs and replanting of trees where applicable.



Line K in Pleasanton:
A large tree branch brought down by a windstorm blocks a Zone 7 maintenance road



Grasses and weeds block a channel pier and prohibit flow in Chabot Canal in Pleasanton after a typical small rain storm

Inspection Program

Throughout the year, Flood Control staff performed inspections to ensure that Zone 7's flood control channels are prepared for the next big storm event. The inspection program comprises of multiple elements, including:

Routine Facilities Inspection

Flood Control staff performed routine inspection by thoroughly inspecting Zone 7 facilities and past repair projects at a minimum of once per month and documenting any problems. Problematic areas were tracked on a spreadsheet with relevant information, such as description, priority, location, and dates. These spreadsheets are used to prioritize future repairs and improvements.

Project Specific Inspection

Flood Control staff provide inspections for both Maintenance and Capital Project related projects. Staff is generally responsible for inspecting any project that requires an Encroachment Permit from Zone 7 as well. Staff inspectors act as the eyes and ears for the Project Engineer and report their findings on a daily basis. Only after communicating with the Project Engineer, does the inspector inform a contractor of the directive.

Storm Watch Inspection

During major storm events, Flood Control staff immediately changed into a pre-emergency response organization, working to minimize the loss of life and property. Flood-fighting activities such as responding to emergency phone calls, storm monitoring, and field patrolling were top priorities during the storm season. Flood Control staff documented all areas that are more prone to problems during storms.

On-Call Emergency Response

For emergency situations, such as flooding or major damage to facilities and other property related issues (i.e., hazardous material spilled into Zone 7's flood control facilities), Flood Control staff was on-call and ready to respond as necessary. Both FANFA and the Alameda County Public Works crews would be available in assisting Zone 7 in providing both labor and equipment in dealing with such emergencies. In 2011, there were no flooding or flood control facility related emergencies.

Miscellaneous Facility Maintenance

Facility Fencing Repairs

Zone 7 Flood Control protects its facilities from trespassers through the use of fencing around the property line. When fencing is damaged, it becomes a liability to Zone 7 if the fencing is not fixed. An annual fencing contract with Calco Fencing has been utilized to fix cut or damaged fences, install new fence netting and access gate repair to maintain the required level of security at Zone 7-owned facilities.



Line G-1-1 in Pleasanton: The fence adjacent to Stoneridge Dr. was damaged due to an out of control vehicle. Calco Fencing contractor came in and repaired the fence to its original state.

SUMMARY

In summary, the following are some of the key activities contained in this year's report:

- Collaborated with local municipalities and parks districts in their planning and construction of trail projects utilizing flood control channel maintenance access roads.
- Coordinated with the Army Corps of Engineers to continue with our eligibility for federal funding in the event of a storm disaster.
- Participated in the Alameda County Clean Water Program.
- Initiated the development of Hydrology and Hydraulic models of the watershed to prepare for the Stream Management Master Plan (SMMP) Update. The development and calibration of these models is being performed by in-house Zone 7 staff and is scheduled to be completed by mid-2012.
- Finalized a \$10 million Partnership Agreement with the City of Livermore for flood protection improvements within the El Charro Specific Plan Area and completed majority of the improvements.
- A grant of \$190,000 was approved by the State Coastal Conservancy to help fund a revision of the SMMP that would frame SMMP projects within a larger, more integrated ecosystem/watershed context.
- Administered a mini-grant pilot program to assist local landowners in furthering the goals of the SMMP for private property work.
- Staff served as Chair of two multi-agency working groups that support environmental studies and collaboration in the Alameda Creek watershed.
- Zone 7 participated in a collaborative effort involving the Natural Resources Conservation Service and the Alameda County Resource Conservation District to support bank stabilization projects on the SFPUC owned portion of the Arroyo de la Laguna.
- Completed twenty-two maintenance repair projects using contract laborers at an approximate construction cost of \$1 million, excluding planning, permitting, design and construction management. The planning, permitting, design and construction management activities related to these maintenance projects were performed by Zone 7 staff.
- Other small activities such as vegetation management, graffiti abatement, mowing, and fencing were completed utilizing both the Alameda County Public Works Agency maintenance laborers (\$400,000 contract) as well as outside contractors.
- Staff development activities included training in Civil 3D, AutoCAD Map 3D mapping software, hydrology and hydraulic modeling programs, HAZWOPER 8-hour refresher on hazardous materials handling, GIS seminars, and stream bank assessment and restoration training.