Contra Costa County
Flood Control
& Water Conservation District

2014 Annual Report

CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Message from Julie Bueren, Chief Engineer

We have accomplished much in 2014, including community celebrations, native plantings, trash cleanups, creating a safety video, improving swiftwater rescue, receiving a quarter million dollars in grant funding for flood safety improvements, completing a $14 million dollar flood protection basin, starting our pilot infrastructure assessment program, and evaluating our financial condition. Our diverse community outreach events engaged hundreds of people from across the County, helping to increase local support for the Flood Control District.

Financial reporting reinforced our concerns that our aging infrastructure and unsustainable service levels are headed for a crisis. Almost 40% of our $1 billion of flood protection infrastructure will be over 50 years old by by 2020. Our current funding only allows for maintenance service levels at 22% of what it should be per industry standard. To continue providing County-wide flood protection into the future, we need additional funds for maintenance, capital programs, and facility replacement. Our primary focus will be on additional funding until we have achieved financial sustainability.

Once again, 2014 found the Flood Control District in the community, and working not only for our residents, but with them. By partnering even more this year, we will increase community engagement to help build a sustainable future.

1.0 Summary of Accomplishments

Since the District's last report in November 2013 we have accomplished the following:

The District implemented the Giving the Natives a Chance program, which focused on engaging the community in the District's facilities. In December 2013, we partnered with the non-profit Restoration Trust and held our first planting in the Clayton Valley Drain. The event was well attended, and 90 volunteers planted 1,600 native grasses and sedges as part of an experiment to study ways to reduce invasive grasses and herbicide use in flood control channels. A follow-up event was held in December 2014. Thirty volunteers returned to plant 1,800 plugs to bolster the native grasses and sedges.

The next volunteer event was held when the District celebrated the completion of the Upper Sand Creek Basin project. A planting day was held in partnership with the Friends of Marsh Creek Watershed. In just a few hours, 150 volunteers planted 400 native plants from the Flood Control District's volunteer nursery in the 10-acre restored wetland area. This project was unique in that the native plant seeds were harvested from the site prior to construction, grown and cared for by District staff, and then returned to the site.

After years of legislative effort, Lower Walnut Creek was returned to local control when President Obama signed the Water Resources Reform and Development Act of 2014 in June. This removed the lowest four miles of Walnut and Pacheco Creeks from the Army Corps of Engineers control. This allows the District to move forward with a community-based restoration planning effort that incorporates flood protection, wetland restoration, and recreation opportunities. To celebrate, a media event was held in July at Pacheco Marsh. Speakers included Congressman Mike Thompson, and representatives from the Board of Supervisors, East Bay Regional Park District, and Muir Heritage Land Trust.

A report was issued by the Army Corps of Engineers listing levee deficiencies in the stretch of Walnut Creek that remained under federal jurisdiction, which resulted in several unacceptable ratings and delisting from disaster relief funding. Our investigation found that the ratings were due to inaccurate data by the Corps, as well as reduced levels of maintenance from the District. Those issues will be resolved in 2015 allowing the Corps of Engineers to reinstate our disaster relief funding.

Thanks to the assistance of the County's Public Information Officer and CCTV the District continued developing our Communication and Outreach plan. This included planning and producing targeted media releases and creating an outreach video.

The Creek and Channel Safety Awareness Program remained a priority. We created a kid-friendly safety video with the students of Mt. Diablo High School's Digital Safari Academy in the spring. In the summer we worked with the Contra Costa County Fire Protection District Swiftwater Rescue Team to install improvements at their primary rescue site for the Walnut Creek channel, and provided funding for swiftwater rescue equipment for training and use in County waterways.

The consultant selection process was completed for the Conditions Assessment of Critical Infrastructure program, and we made significant progress on our pilot program to assess facilities in three watersheds.

Progress was made on our capital projects. Upper Sand Creek Basin was completed in April. This $14 million project was the largest locally-funded project in District history. Design of the Wildcat and San Pablo Creeks Critical Levee Repair Project is nearing completion. This project would not have been possible without a $1.5 million grant obtained in 2013, or the State's 90% contribution, requiring only a 10% match. It will protect the community of North Richmond from flooding impacts, and meets strict Army Corps of Engineers and FEMA standards.

We received a $250,000 grant from the State to install ten stream gages in critical areas which will provide better data for flood prediction and warning, improving community flood safety.

2.0 Performance Measures

In 2014 two new performance measures were adopted regarding; 1) the level of flood protection provided to communities, and 2) Flood Control District undesignated fund balance.

2.1 Level of Flood Protection: A composite view of the level of flood protection provided by all regional flood protection facilities showed that, on average, they provide 90% of the target level of flood protection. When these facilities were new, they provided 100% of their designed level of flood protection. Due to factors such as increased urbanization, higher flood protection standards, as well as decreased maintenance service and funding, the level of flood protection provided by our regional facilities has been in decline. The FC District will continue to evaluate this benchmark every five years and develop action plans to address the various factors involved, with the goal to return to 100% level of flood protection provided for all facilities.

Core Service Area (External): Flood Control, Level of Flood Protection (D R A F T)

Strategic Focus Areas

☒Customer Service ☒Safety ☐Organizational Health ☒Financial Stability

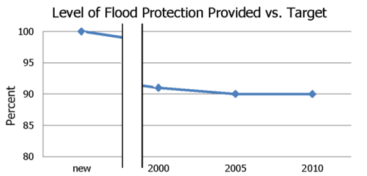
Goal

The flood protection level provided by Flood Control District facilities is measured every five years in order to inform decision makers and set priorities.

Desired Results

- Determine the current level of flood protection provided by each facility vs. the target level
- Communicate the level of flood risk to decision makers
- Develop plans to achieve the target level of flood protection for each facility
- Communicate funding needs to community
- Increase level of flood protection provided where feasible

Status



Overall weighted average by facility and region.

Analysis

The original level of flood protection provided by the District's 79 miles of flood protection channels and 29 dams and basins was based on community needs and funding available at the time. Over time, this level of flood protection was impacted due to:

- community development
- community expectations
- flood protection standards
- maintenance funding and service levels
- climate change

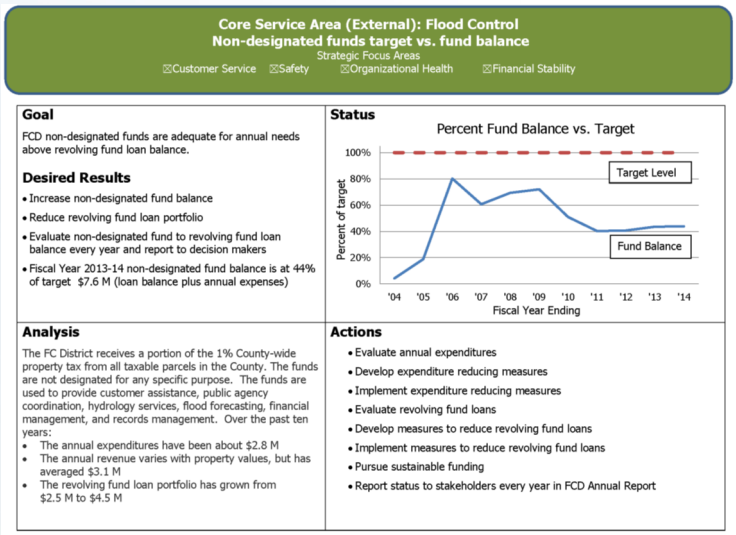
The District has not been able to meet the target level of flood protection in every community.

Actions

- Continue to improve GIS data on District facilities
- Continue to perform hydraulic studies of District facilities on a set schedule
- Use existing stakeholder meetings to communicate flood risk and funding needs
- Complete Wildcat and San Pablo Creeks levee improvements scheduled for 2015
- Pursue sustainable funding
- Report status to stakeholders every 5 years in FCD Annual Report

Level of Flood Protection Performance Measure

2.2 Flood Control District Undesignated Fund Balance: Funding for maintenance of regional flood protection facilities comes primarily from a percentage of the 1% ad valorem tax. Revenues have been capped as a result of Propositions 13 and 218, thus staff has had to redistribute revenue to fund basic maintenance for drainage area zones that have zero revenue or inadequate revenue. The redistribution of funds is achieved through the District's revolving fund loan program, typically borrowing funds from the District's undesignated fund. Over the years, the loan balance has grown to $4.5 million, and the remaining undesignated fund balance has decreased to $3.4 million. A target undesignated fund balance was set for 2014 at $7.7 million to keep a buffer for annual operating expenses above the loan balance, so the $3.4 million fund balance is currently only 44% of the target level.



Performance Measure: Undesignated Fund Balance

Continuing these loans, even when coupled with lower service levels, deferred maintenance, and deferred capital improvement, is not sustainable, and the undesignated fund is projected to be depleted in less than 10 years. Once that occurs, there is no backstop source of revenue, and County General Funds may be needed.

3.0 Financial Summary

The Flood Control District was formed in 1951 to provide regional flood protection for Contra Costa County. Since then, 79 miles of channels and 29 detention basins have been constructed. The estimated asset value is over $1 billion (in 2010 dollars), and the facilities protect an estimated $25 billion in property value in historic floodplains. Federal and State government programs funded 90 to 95 percent of the construction costs. These regional facilities collect stormwater from community drainage systems in the developed unincorporated County (and cities). Maintenance and capital funding for regional Flood Control District facilities comes primarily from a percentage of the 1% ad valorem property tax. Maintenance funding for community drainage facilities comes from stormwater utility assessments, which were established in 1993. Prior to that time, community drainage maintenance was paid for out of County General Funds. Road system drainage maintenance is funded by a portion of the local share of gas tax. Each city funds maintenance for their community drainage systems, typically with their stormwater utility fees.

Maintenance funding was established when facilities were brand new and little expense was required, then Proposition 13 froze those low rates. Since that time, expenditures have been capped due to limited revenue, resulting in service levels being at the bare minimum. After many years of this practice, the outcome has been poor facility conditions and an increasing backlog of deferred maintenance. The current funding level for our regional and community drainage maintenance is about $5 million per year, which is about 0.4% of our infrastructure value ($1.3 billion in 2010 dollars). To meet the industry standard for adequate maintenance which is 2% of infrastructure value, the funding need is about $24 million per year. Our current funding level is about 22% of the need. The initial level of maintenance funding which may have been adequate for brand new facilities was not increased over time to the level necessary to adequately maintain aging facilities. Since about 40% of our facilities will be 50 years or older in 2020, the lack of maintenance funding is becoming more and more critical.

When regional planning, capital improvement, and capital replacement needs are added to the maintenance need, the annual funding need is approximately $83 million, compared to the current revenue of about $11.5 million. We are now including capital replacement needs in our financial planning because in 2029 the first regional flood protection facility reaches its expected service life of 75 years and will need replacement or major rehabilitation soon thereafter. Overall, our current revenue is 14% of the total estimated need. None of the regional flood protection funding zones have adequate funding, and three have zero revenue. For example, Wildcat Creek receives about $69,000 annually, which is 9% of the $800,000 maintenance funding needed to meet the 2% of infrastructure value industry standard, and it is 1% of the $4.9 million total programs funding need.

Historically, FC District regional flood protection has not needed County General Fund support. Inadequate funding has been managed by reduced service delivery, deferred maintenance, deferred capital improvements, and loans from the FC District undesignated fund. This is not sustainable as the FC District undesignated fund is projected to be depleted in less than 10 years. Once that occurs, there is no backstop source of revenue other than County General Funds. Due to increases in community drainage maintenance costs, the need for County General Funds (provided prior to 1993) has returned.

Figure 1 below graphically shows the funding history and projected annual need for sustainable funding levels to adequately fund regional and community drainage programs. Please refer to our Financial Report on our web page for more detail.

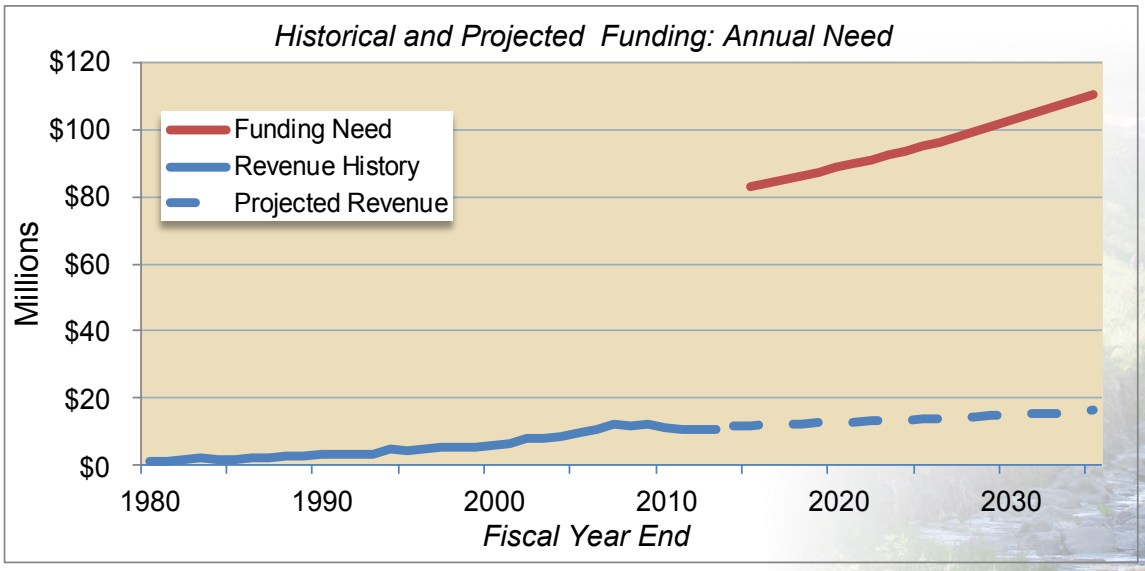


Figure 1. Regional and Community Drainage Funding Need – All Programs

4.0 Potential Funding

Most flood protection, drainage, and stormwater agencies statewide suffer from inadequate funding. Proposition 13 froze tax rates at low levels, and Proposition 218 has made it difficult to increase revenue. Staff has already been working with statewide organizations such as California State Association of Counties, County Engineers Association of California, and others on a Statewide Stormwater Funding Initiative to exempt stormwater agencies from Proposition 218 voter

requirements, similar to how water and wastewater utility districts are funded. Support is building across the state, and legislation will be introduced in early 2015 to initiate this funding measure. We recommend the County continue its support of the legislative effort to get this funding measure into place.

5.0 Action Plans Update

We have made progress on some of the action plans presented in our November 2013 Annual Report (items 1 – 8 in Figure 2 below) and thus reduced the cost of future action plans to approximately $9 million.

No.	Action Plan Description	Cost Est.	Time (yrs)	Start
1	Sediment Studies at Channel Mouths	$250,000	8	February 2008
2	Study Level of Flood Protection	$1,640,000	14	December 2008
3	Review and Report on Financial Status	$50,000	1	June 2012
4	Develop Financing Plan	$50,000	1	June 2012
5	Develop Communication and Outreach Plan	$100,000	1	February 2013
6	Improve Flood Forecasting and Warning Systems	$300,000	2	April 2013
7	Conditions Assessment of Critical Infrastructure	$5,500,000	7 - 9	October 2013
8	Seismic Study of 5 Dams	$1,250,000	4	2015
	Assessments Total:	**$9,140,000**	**14**	

Figure 2. Overall FC District Action Plans Cost and Schedule - 2014 Update

6.0 Conclusions and Recommendations

The Flood Control District's aging infrastructure and unsustainable service levels are major concerns that deserve attention, and in the near term we will focus primarily on seeking additional funding. Community outreach events increased local support for the Flood Control District. Those events should be continued as they are one of the key elements for building a sustainable future.

This effort to obtain sustainable funding sources is being referred to the Transportation, Water, and Infrastructure Committee for detailed study and recommendations.

For more information and previous Annual Reports, refer to our web page at www.cccounty.us/FCDReports, or contact Tim Jensen at tjens@pw.cccounty.us.