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5/25/05

CALIFORNIA
DEPARTMENT OF WATER RESOURCES

FLOODPLAIN MANAGEMENT BRANCH

FIVE-YEAR FLOODPLAIN MANAGEMENT PLAN

Prepared for

FEDERAL EMERGENCY MANAGEMENT AGENCY

2005

EXECUTIVE SUMMARY

FLOODPLAIN MANAGEMENT IN THE STATE OF CALIFORNIA

California's Floodplain Management Program is ever-changing and reemerging. Flooding has always been prevalent and now, more than ever, has the attention of the public and Legislature. Recent events such as increased flooding, alluvial fan/mudslide tragedies, levee breaks, and especially a $450 Million settlement has guided floodplain management policy at the State level. Combined with increasing population, development rate and mapping needs, California is realizing that status quo is unacceptable. The State's Floodplain Management program is a balance of proactive and reactive actions. Two recent reports have recommended key actions at all levels.

The vision for California's Floodplain Management program is dependent upon collaboration among the State's Legislature, Floodplain Management groups and local officials. Together, guidance needs to be provided to the public, as evident in heightened technical assistance needs. Implementation is heavily dependent upon funding, education and understanding of potential flood risks. California's program is at the brink of major improvement and leadership.

FIVE-YEAR FLOODPLAIN MANAGEMENT

In the past two decades, California's Floodplain Management has been recognized as being proactive and innovative. The Association of State Floodplain Managers has awarded California's floodplain management program or its component four times, most recently in 2000 and 2002.

Due to funding constraints, the most recent years have been linked to the Community Assistance Program contract with the Federal Emergency Management Agency. However, California continued to develop proactive tools to advance Floodplain Management, when possible. The Department of Water Resources has continued to place focus on training local officials and becoming active at the national and state floodplain management associations.

The next five years for California's floodplain management program will focus on increasing Certified Floodplain Managers, Community Rating System participation, hiring more staff and resolving the problem with schools and hospitals, which are not covered under the State's Executive Order on Floodplain Management. This includes partnering with other State agencies to improve statewide floodplain management issues such as Pre-Disaster Mitigation proposals and manufactured home parks.

Undoubtedly, the challenges are overwhelming and diverse. However, with unified partnerships at all levels, increased communication and training, and stable funding, California's floodplain management program can only be strengthened to serve its deserving people.

INTRODUCTION

BACKGROUND

In 1968, Congress passed and the President signed into law the National Flood Insurance Act, which created the National Flood Insurance Program. The NFIP was to provide three basic components: identification of flood hazards, flood insurance, and floodplain management guidance.

NATIONAL FLOOD INSURANCE PROGRAM AND DWR'S RELATIONSHIP

Since the late-1970's, the State of California has participated in FEMA's National Flood Insurance Program. This program sets policies and standards for development in flood-prone areas. Annually, FEMA has contracted with the State to complete specific contract items. The contract is under the Community Assistance Program – State Support Services Element Grant.

The responsibility of California's floodplain management program is assigned to the Division of Flood Management (Headquarters), which subcontracts part to four District offices throughout the State. Headquarters has approximately five Person Years managing and working on the Program, which includes the Floodplain Mapping component. The District offices are part of the Division of Local Assistance and are located in Red Bluff, Sacramento, Fresno and Glendale. Due to funding, less than one Person Year is assigned to the program at each office; however, the workload is more than one PY.

In FY 2004-05, the Department's Floodplain Management staff decreased suddenly, during recovery of a hiring freeze and prolonged budget crisis. Our Northern District located in Red Bluff, decided not to participate due to insufficient staff, and their future participation is unknown. Our Southern District staff member located in Glendale, was deployed to active military duty for an unconfirmed amount of time. Southern District is operating on limited staff, which is currently undergoing training. In addition, a Headquarters retired staff member located in Sacramento permanently retired.

DEPARTMENT OF WATER RESOURCES

Overall, the California Department of Water Resources' major activities include water supply, planning and development, and public safety through flood prevention and dam safety.

The Department's mission is "to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments." The Department's website can be accessed at http://wwwdwr.water.ca.gov

With a staff of approximately 2,700 and a $1 billion annual budget, the California Department of Water Resources administers increasingly complex programs involving flood control for the Central Valley, dam safety for more than 1,200 dams statewide, local assistance projects, water management strategies, water quality improvement,

and water supply data collection and studies. DWR staff provides technical and financial assistance to local water communities, works with a number of governmental and wildlife agencies on environmental issues and projects, manages SWP and Reclamation Board lands, educates the public about California's water resources, and operates and maintains the State Water Project, one of the largest water development and distribution systems in the world. The SWP delivers 26 million acre-feet annually.

State Water Project

The California State Water Project is the nation's largest state-built water and power development and conveyance system. It includes facilities—pumping and power plants; reservoirs, lakes, and storage tanks; and canals, tunnels, and pipelines—that capture, store, and convey water to 29 water agencies. Its engineers planned, designed, and oversaw the construction of the facilities. Contractors placed bids to construct various structures. Currently, DWR staff operates and maintains all facilities, as well as keeps accounting of contracts and water deliveries. DWR staff has also improved SWP control systems and communications.

DIVISION OF FLOOD MANAGEMENT

The Division's mission is to prevent loss of life and to reduce property damage caused by floods; to facilitate recovery efforts following any natural disaster; and to provide runoff forecasts and maintain a hydrologic database. The Division is committed to actively seek cooperation with and gain the confidence of other groups, and recognizes the importance of environmental resources -- striving to preserve these and other resources when meeting public safety responsibilities. The Division's website can be accessed at http://www.dfm.water.ca.gov

OVERVIEW OF DIVISION PROGRAMS

The Floodplain Management Branch is one of five branches within the Division of Flood Management. The Branch's website can be accessed at http://www.fpm.water.ca.gov Below is an outline of the major responsibilities of California's Flood Management Program:

Floodplain Management and Mapping

- Assist local officials with training, model ordinance, planning, and evaluating floodplain development.
- Conduct community audits and workshops.
- Promote Community Rating System.
- Encourage communities to limit development in flood-prone areas and promote flood proofing of existing structures.
- Advance floodplain mapping, both approximate and detailed.
- Implement State Floodplain Management Task Force recommendations as resources allow.

Hydrology and Flood Operations

- Cooperate with the National Weather Service to monitor weather and river conditions throughout California and issue river and tide forecasts.
- Operate and maintain the California Data Exchange Center which can be accessed at http://cdec.water.ca.gov
- During flood emergencies, activate the Flood Center under the State Emergency Management System. Maintain close ties with federal, State, and local flood management agencies and request federal emergency assistance when needed.
- Provide flood fight assistance to local agencies when needed.
- Conduct cooperative snow surveys and provide statewide water supply forecasts.

Flood Control Project Planning, Design, and Construction

- Cooperate with the U.S. Army Corps of Engineers and Local Agencies to plan, design, and construct flood control projects throughout California. For projects in the Central Valley, provide staff support for The Reclamation Board.

Flood Protection Corridors

- Select, help plan, and fund the acquisition, restoration, enhancement, and protection of lands along rivers and streams in California to provide flood protection, protect agricultural lands, and improve wildlife habitat.

Flood Control Project Maintenance and Protection

- Maintain key portions of the Sacramento River Flood Control Project, including overflow weirs, pumping plants, floodways, and levees.
- Inspect and enforce maintenance standards for levees and floodways throughout the Sacramento River Flood Control Project and the San Joaquin River Flood Control System. Identify and eliminate illegal encroachments in the system.
- Evaluate and assure the integrity of the flood control system through rehabilitation, sediment removal, and repair.

After Floods and Other Disasters

- Help communities recover by coordinating assistance from the Federal Emergency Management Agency, the Office of Emergency Services, and other sources.
- Coordinate the collection of high-water marks, flow data, and damage reports to help in preparing for future events.

OTHER KEY DEPARTMENT OF WATER RESOURCES MITIGATION ACTIVITIES

- Dam Safety Program – Division of Safety of Dams inspect non-federal dams in California and analyzes the Operation and Maintenance of dams to evaluate if the spillway passes design floods related to downstream flooding. The Program also identifies dam-break inundation zones. The Program provides State Activity Credit for NFIP's Community Rating System Program.
- Division of Operation and Maintenance maintains Oroville Dam, which is a flood control storage reservoir in northern California. The reservoir operations are

coordinated with the U.S. Bureau of Reclamation and U.S. Army Corps of Engineers. All three entities are co-located in one building, the Joint Operations Center (JOC). Co-locating these efforts has proven to be an asset and a model for other entities. The Division of Flood Management and its Flood Emergency Operations Center are also located at the JOC.

STATE OF CALIFORNIA FACTS

Approximately 2/3 of California's water is from Northern California, however 2/3 of the State's population lives in Southern California. The State Water Project coveys water from the northern to the southern part of the State. Currently, Central California is projected to see a dramatic increase in population, with over half in floodplains.

California is faced with riverine, coastal, alluvial fan and tsunami flooding. Disparate climatological patterns present challenges to flood mitigation planning in California, including:

- El Nino conditions
- La Nina conditions
- Santa Ana conditions
- Northwest coastal conditions
- "Pineapple Express" patterns
- Drought
- Desert monsoons
- Tropical storms
- Gulf of Alaska storms

FLOOD DISASTER HISTORY

According to the California Governor's Office of Emergency Services 2004 State Multi-Hazard Mitigation Plan, California has a chronic and destructive flood history. Of seventy-two federally-declared disasters in the State between 1950 and 2000, half were flood-related. Since 1950, every one of California's 58 counties have been federally declared due to flooding at least three times.

Between 1992 and 2004, every county in California was declared a federal disaster area at least once for a flooding event. The counties of Los Angeles, Orange, and San Bernardino were declared federal flood disaster areas five times, and sixteen other counties were declared disaster areas four times.

The table below describes federally-declared flood disasters in California since 1990.

FEDERALLY-DECLARED DISASTERS IN CA SINCE 1990

Disaster #	Date	Scope (# of Counties)	# of Deaths	Damage in $
935-DR-CA	Feb-92	6	5	$123.2 Million
979-DR-CA	Jan-93	25	20	$600 Million
1044-DR-CA	Jan-95	45	11	$741.4 Million

1046-DR-CA	Feb-95	57	17	$1.1 Billion
1155-DR-CA	Jan-97	48	8	$1.8 Billion
1203-DR-CA	Feb-98	40	17	$550 Million
1529-DR-CA	Jun-04	1	0	$100 Million (pending)
1577-DR-CA	Dec-04	7	NA	$235 Million (pending)
1585-DR-CA	Feb-05	7	NA	$78 Million (pending)

Initial Source: OES, *Origins and Development—A Chronology 1917-1999*

STATE AUTHORITIES TO IMPLEMENT FLOODPLAIN MANAGEMENT

COBEY-ALQUIST ACT AND EXECUTIVE ORDER B-39-77

The Statutory Citations, which give support to California's participation in the NFIP, are the Cobey-Alquist Flood Plain Management Act (Water Code 8400-8415) and Executive Order B-39-77 on Floodplain Management (for State Buildings). The Cobey-Alquist Act discusses 1) Review of Flood Plain Management Plans, 2) Establishment of Flood Plain Regulations, and regulates designated floodway use and reimbursement costs for federal flood control project lands, easements and right-of-ways. The 1977 Executive Order requires both compliance with NFIP regulations, and broad and general consideration of hazards associated with building in Special Flood Hazard Areas, specifically for State facilities. In 2002, the California Floodplain Management Task Force created and recommended a proposed revised Executive Order for the State's consideration.

FLOOD EMERGENCY ACTION TEAM REPORT – 1997

Following the January Floods of 1997, the Governor convened a Flood Emergency Action Team, which developed over 50 recommendations to guide both structural and nonstructural flood management to protect citizens, save prime agricultural land, and protect and enhance the environment. The findings included: 1) improved emergency response capabilities, 2) short-term improvements in floodplain management, 3) expedited repair, restoration, and improvement of the flood control system, and 4) comprehensive, basin-wide planning for flood control. The 290-page report can be accessed at http://rubicon.water.ca.gov/FEATReport120.fdr/featindex.html

CALIFORNIA FLOODPLAIN MANAGEMENT TASK FORCE REPORT – 2002

In 2002, the Department of Water Resources convened a California Floodplain Management Task Force, which developed 38 recommendations related to development in flood-prone areas. The recommendations were divided into three categories: 1) Recommendations for Better Understanding of and Reducing Risks from Reasonably Foreseeable Flooding, 2) Recommendations for Multi-Objective Management Approach for Floodplains, and 3) Recommendations for Local Assistance, Funding and Legislation. The 96-page report can be accessed at http://fpmtaskforce.water.ca.gov

LANDMARK LEGAL CASE – PATERNO

The Paterno Lawsuit court finding increased the State's liability of "grandfathered" levees. In California, the State accepted about 1,100 miles of project levees from the federal government. Many of these levees were constructed by local entities to protect agricultural land. In February 1986, a flood occurred which caused more than $500 million in damage and the Governor proclaimed 39 counties disaster areas. During the same event, in northern California, a levee failed that affected about 24,000 people and damaged 3,000 homes. Afterwards, the Paterno Lawsuit was filed against the State. In November 2003, the California courts in a final ruling stated that when the State of California accepted the levees, it also accepted liability as if the State had planned, designed and built the levees. The State is facing damage costs of hundreds of millions or even billions. The increased liability served as an impetus for a status report of the State's flood condition.

DEPARTMENT OF WATER RESOURCES – FLOOD WHITE PAPER

In January 2005, DWR submitted a white paper, entitled "California's Flood Crisis" to the State Legislature. The report discussed the State's flood condition and developed seven Recommendation Strategies and three Proposed Legislation and Constitutional Actions. One particular proposed action is to "Create a Central Valley Flood Control Assessment District with the authority to assess fees that would provide adequate flood control protection for regional participants." The 21-page report is enclosed.

THE STATE'S 5-YEAR VISION FOR FLOODPLAIN MANAGEMENT

CURRENT EFFORTS

For the past 20 years, California's Floodplain Management Program efforts have included the annual contract activities with FEMA, such as Community Assistance Visits and Ordinance Reviews. However, several proactive items developed by DWR have been included as contract items, such as workshop development and presentations, and community outreach projects.

Although the State's Floodplain Mapping Program is not included in the CAP-SSSE contract with FEMA, the State actively seeks cooperative opportunities with FEMA. In 1997, DWR created the Awareness Floodplain Mapping program. This program develops advisory floodplains outside of FEMA's floodplains for areas of new growth potential. Currently, the Map Modernization efforts are focused on the establishment of a Levee Database, which will identify all levees and assess them for certification.

Additional efforts include:

- Partnership with the Governor's Office of Emergency Services in developing the Flood Component of the State's Multi-Hazard Mitigation Plan
- Completion of the California Floodplain Management Task Force and its recommendations report, and
- Encouragement of staff and local officials to obtain their Certified Floodplain Manager license.

More detailed information on current efforts are given below under "Overview of Floodplain Management Program Activities."

PLANNED FUTURE ACHIEVEMENTS

The upcoming five years in California Floodplain Management will be affected by the changing priorities in California government. This includes strengthened focus on the State's flood condition, increased liability, and deteriorating levees.

Future achievements will also focus on more education and awareness of flood risks to local communities. This will be accomplished through additional courses and workshops, and possibly another task force. Assembly Bill 2141 (2003) requires DWR to convene an Alluvial Fan Task Force to develop strategies, especially tools for local governments. These hazard areas face a particular increase in development. A separate workplan projects the cost of the AFTF to be $832,466.

In addition, a Comprehensive Floodplain Management Reference Manual for locals is forthcoming. Also, more effort in increasing the Community Rating System Program participation rate is being reviewed.

The Floodplain Mapping Program is planning and has begun to complete a Levee Database with FEMA funding. The Database will be designed so that all agencies can add information to the database. Independent of FEMA, the State will pursue more detailed floodplain mapping, with a focus on the Central Valley. FEMA's focus in California is DFIRM conversion, with a FY 2005 project amount of $12 Million.

More detailed information on planned future achievements are given below under "Planned Fundable Activities Proposed for Additional Funding."

STRENGTHS AND WEAKNESSES

The Floodplain Management Program will match efforts with funding, as it becomes available, to achieve the planned objectives.

The Program's strengths are:

- Proactive foundation for floodplain management
- Increased focus at the Legislative level
- White Paper "FLOOD WARNINGS: Responding to California's Flood Crisis"
- California Floodplain Management Task Force report
- Mapping Program funds
- Involvement with Floodplain Management organizations at State and National level

Despite the staff's eagerness, the following Program's weakness will be challenging to overcome:

- Funding
- Inability to Cross Train due to no additional staff

- Insufficient number of staff
- Increased demand for floodplain management technical assistance
- Increased liability due to the Paterno Case
- Need for training and education for new DWR management
- Increased importance of the NFIP within DWR and the nation
- Rapid growth and development in floodplains
- No standard approach/solution for specific floodplain management situations

FLOODPLAIN MANAGEMENT STRATEGIES

California has undergone an assessment by the California Performance Review team. The CPR recommendations combined with the recent Paterno Case court finding bring uncertainty to the State's floodplain management program budget for the next few years. However, if funding were assumed to be stable, with steady increases, below are the Program's current and planned activities.

OVERVIEW OF FLOODPLAIN MANAGEMENT PROGRAM ACTIVITIES

Listed with Contract Items, Program Milestones, Partnerships, and Performance Metrics

The CAP-SSSE work is divided between Headquarters and the three to four District Offices throughout the State. The fundable floodplain management activities under the Community Assistance Program and non-fundable activities that California will engage in are discussed below. Each task and proposed task listing includes Program Milestones, Strategy, Partnerships, and Performance Metrics, where appropriate.

STAFF ALLOCATION FOR FLOODPLAIN MANAGEMENT ACTIVITIES

DWR's FLOODPLAIN MANAGEMENT PROGRAM ACTIVITIES 2005-2009												
FUNDABLE ACTIVITIES UNDER CAP CONTRACT												
			2005		2006		2007		2008		2009	
Task (hrs)	Monthly (hrs)	NFIP Program	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)
50		Community Assistance Visits (including Ordinance)	52	2600	60	3000	60	3000	60	3000	60	3000
1		CIS Input of Information	52	52	60	60	60	60	60	60	60	60
10		Ordinance Review	1	10	1	10	1	10	1	10	1	10
	8	State Model Ordinance Research and Update	12	96	12	96		0		0		0
64		Basic NFIP Workshop	3	192	3	192	3	192	3	192	4	256
60		Sub.Improvement/Sub.Damage Workshop	3	180	2	120	2	120	3	180	3	180
60		Elevation Certificate Workshop	4	240	4	240	4	240	4	240	4	240
64		Community Rating System Workshop	0	0	1	64	2	128	2	128	2	128
64		Approximate Zone A Workshop	2	128	2	128	2	128	2	128	2	128
64		Train the Trainer Workshop (Internal)	0	0	1	64	1	64	1	64	1	64
64		CFM Preparation Workshop	0	0	1	64	2	128	2	128	2	128
30		CFM Certification by Staff (of 5)	1	30	1	30	1	30	1	30	1	30
504		Develop New Workshops	2	1008	1	504	0	0	1	504	0	0
64		Technical Conference Participation	1	64	1	64	1	64	1	64	1	64
	8	CRS Participation (of 520 NFIP communities)	12	96	12	96	12	96	12	96	12	96
		Post-Disaster Assistance (as needed)	0	120	0	0	0	0	0	0	0	0
	8	Coordination w/ other Agencies	12	96	12	96	12	96	12	96	12	96
Technical Assistance												
	87	NFIP Assistance	12	1040	12	1040	12	1040	12	1040	12	1040
	35	Mapping Assistance	12	416	12	416	12	416	12	416	12	416
Outreach												
80		Golden State Floodlight Newsletter	2	160	2	160	2	160	2	160	2	160
210		State Fair Exhibit/special event w/hydraulic models	1	210	1	210	1	210	1	210	1	210
	8	FPM Web Page Overhaul for Tech Assistance	12	96	12	96	12	96	1	8	1	8
1008		Development of Tabletop Models	0	0	0	0	1	1008	0	0	1	1008
Items from 5-Year Floodplain Mgmt. Plan												
	8	Contact each community with new maps to adopt	12	96	12	96	12	96	12	96	12	96
	4	Create a "NFIP community" packet	12	48	12	48	12	48	12	48	12	48
	8	Contact new NFIP communities - CACs	12	96	12	96	12	96	12	96	12	96
	5	Record number of NFIP violations in CAVs	12	60	12	60	12	60	12	60	12	60
	4	Record # of comm that adopt model ordinance	12	48	12	48	12	48	12	48	12	48
	3	Analyze # of attendees at workshops	12	36	12	36	12	36	12	36	12	36
	4	Quantify and classify Technical Assistance	12	48	12	48	12	48	12	48	12	48
Advance Planning												
336		5-year FPM Plan and update	1	336	1	336	1	336	1	336	1	336
	4	Develop List of PDM Projects with Counties	12	48	12	48	12	48	12	48	12	48
8		Assist in CAV selection based on DWR factors	1	8	1	8	1	8	1	8	1	8
	16	FPMTask Force #5 - Alluvial Fan Task Force	12	192	12	192	6	96	6	96	0	0
	8	FPMTask Force # 7- Reduce Repetitive Loss	12	96	12	96	12	96	12	96	12	96
40		FPMTask Force #10 -1 ft abv BFE in Model Ord	1	40	1	40	0	0	0	0	0	0
	4	FPMTask Force #11 - Executive Order	12	48	12	48	12	48	12	48	12	48
	3	FPMTask Force #12 - State Multi-Hazard Plan	12	36	12	36	12	36	12	36	12	36
	8	FPMTask Force #14 - State Building Codes	12	96	12	96	12	96	12	96	12	96

DWR's FLOODPLAIN MANAGEMENT PROGRAM ACTIVITIES 2005-2009											
NON-FUNDABLE ACTIVITIES UNDER CAP CONTRACT											
			2005		2006		2007		2008		2009	
Task (hrs)	Monthly (hrs)	Proactive Activities	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)	Tasks	Total (hrs)
	10	Participation in State/Nat'l FPM Associations	36	360	4	40	36	360	36	360	4	40
	8	Develop Levee Flood Zone	12	96	12	96	12	96	12	96	12	96
	8	State Strategic Plan for Flood Loss Reduction	12	96	12	96	12	96	12	96	12	96
64		Comprehensive FPM Reference Manual Workshop	1	64	1	64	1	64	1	64	1	64
	8	FPM Task Force #38 - FPM Advisory Group	12	96	12	96	12	96	12	96	12	96
	8	Maintain Flood Map Library (LOMC, FIRMs, FISs)	12	96	12	96	12	96	12	96	12	96
	8	Review EIRs/write comment ltrs for FPM dvlpmt	12	96	12	96	12	96	12	96	12	96
Total hours of Non-Fundable activities per FY			904		584		904		904		584	
Total hours of Fundable activities per FY			8359		8275		8675		8143		8615	
Total Hours per FY			9263		8859		9579		9047		9199	
Total hours of Fundable activities per FY				8359		8275		8675		8143		8615

Task 1 – Community Assistance Visit (CAV) and Ordinance Review

Contract: Conduct 50-60 CAVs, which include Ordinance Reviews

Program Milestones: Complete all CAV visits by June 30 of each year

Partnership: None, however, DWR will use CAVs as training opportunities for other staff

Performance Metrics: An increase in the total number of communities CAVed as tallied during each DWR Monthly Conference Call or meeting.

Task 2 – Local Officials Workshops/Increase Floodplain Management Training

Contract: Conduct 12 Workshops, which include Basic NFIP, Substantial Improvement/Substantial Damage, Elevation Certificate, and Approximate A Zone, by one District office

Program Milestones: Increase from 12 to 15 Workshops per year, conducted by two District offices and DWR Headquarters office.

Strategy: Conduct a Train the Trainer (Internal) course and purchase new IT equipment

Partnership: DWR and FEMA to review workshop material in a timely manner

Performance Metric: Compare number of Workshops conducted per year, and compare the number of workshop attendees per year.

Task 3 – Program Coordination Meeting

Contract: Attend one meeting with Region IX

No Change through FY 2009

Task 4A – Newsletters

Contract: Develop electronic newsletters, minimum four pages in length.

Program Milestones: Increase the communication with communities' in the NFIP program by contacting more California communities and interested entities.

Strategy: Increase the efficiency with an electronic floodplain management newsletter.

No Change through FY 2009

Task 4B – Floodplain Management Awareness Exhibit

Contract: Display a Floodplain Management Exhibit at the State Fair

No Change through FY 2009

Task 5 – ASFPM Conference

Contract: Attendance by two staff members

Program Milestones: Increase attendance to ASFPM and other conferences

Strategy: Conduct Workshops and present technical information

Performance Metric: Compare number of conferences and attendees

Task 6A – Technical Assistance

Contract: Provide 650 hours of technical assistance, which underestimates the actual number of hours provided. Deficit is 390 hours due to demand of 1,040 hours of technical assistance per year.
Program Milestones: Increase contract funding and number of hours by 390 to match the current demand of Technical Assistance hours of 1,040. This would provide 20 hours per week of Technical Assistance, an average of 5 hours per work week, for each of our four offices, including Headquarters.

Strategy: Increase the technical assistance efficiency using the web page by upgrading the Floodplain Management Branch website. This includes creating a method of electronically submitting and responding to questions (an interactive Question & Answer page), and Frequently Asked Questions section.

Partnership: DWR In-house Technical Services

Performance Metric: Compare number of technical assistance given per year

Task 6B – Community Information System

Contract: Update CIS information

No Change through FY 2009

Task 7 – Post-Disaster Assistance

Contract: One staff for four weeks for Post-Disaster Assistance

As Needed

PLANNED FUNDABLE ACTIVITIES PROPOSED FOR ADDITIONAL FUNDING

This section discusses activities that are proposed under the Community Assistance Program for additional funding. The Department would like to foster these activities to further develop a sound State Floodplain Management Program. Currently, these activities are not in the CAP Contract.

Proposed Task 8 – Increase CRS Participation

In 2004, CRS participation saved $8.7 million per year in annual insurance premium discounts. The current California participation rate is 12 percent.

Program Milestone: Increase CRS participation of CA NFIP communities from 12 percent to 20 percent over 5 years

Strategy: Update and deliver CRS Workshop to communities and obtain funding for a State CRS Coordinator

Partnership: Insurance Service Office (ISO) and FEMA

Performance Metric: Compare number of CRS communities per year

Proposed Task 9 – Increase in Certified Floodplain Managers

As of September 2004, five of the State's eight staff members have taken and passed the CFM exam. There are over 45 CFMs in the State of California.

Program Milestones: All of the State NFIP staff members will be CFMs and double the total number of CFMs in the State by FY 2009.

Strategy: Develop or partner with others to present Certified Floodplain Manager workshops and hold a CFM exam at least twice a year.

Partnership: Floodplain Management Association

Performance Metric: Compare number of CFMs in the State per year, especially those that are involved in community and State floodplain management programs.

Proposed Task 10 – Program Coordination with other State Agencies

Policy issues such as schools in floodplains and advising other State agencies on Floodplain Management are of great concern. Also, efforts to approve the proposed revised Executive Order on Floodplain Management need to be completed.

Program Milestones: Increased State inter-agency coordination resulting in improved floodplain management. Host regularly scheduled meetings with other State Agencies, especially the Department of Education, Office of the State Architect and Department of Transportation until issues are resolved.

Strategy: Possible creation of a Floodplain Management workshop, specifically for State Agencies. Document the number of workshops, meetings, technical assistance visits, and project reviews with other State agencies describing how these improved the State's floodplain management.

Partnership: various State Agencies

Performance Metric: Compare number of meetings, trainings and technical assistance responses given per year to other State Agencies

Proposed Task 11 – State Model Ordinance Research

The State needs to complete its Automatic Adoption Clause research to determine if it is valid in California. The State needs to review the State Model Ordinance and include more restrictive language, if applicable.

Program Milestones: Update the 2001 Model Ordinance and if there are substantial changes, issue a new update in 2005-2006.

Strategy: Contact DWR Legal Office for the Automatic Adoption Clause and review the Model Ordinance at least once a year

Partnership: DWR Legal

Performance Metric: Determine if Automatic Adoption Clause is valid and compare the number of times that the Model Ordinance has been reviewed.

Proposed Task 12 – Technical Conference Participation

The Department has acted as a liaison among FEMA, U.S. Army Corps of Engineers, and host organizations for FEMA and the U.S. Army Corps of Engineers to conduct relevant workshops at conferences.

Program Milestone: FEMA participation at every major California Floodplain Management conference.

Strategy: Participate (in a limited capacity) in conference planning and request FEMA and OES to present workshops/material at the conferences.

Partnership: Floodplain Management Association, ASFPM, FEMA and OES

Performance Metric: Compare the number of FEMA involvement in major conferences with other years.

Proposed Task 13 – Mapping Assistance

This task of participating in the development of mapping priorities, the scoping of studies, and in community meetings is delegated to the Division's Floodplain Mapping Section.

Proposed Task 14 – Hydraulic Models/Creation of Tabletop Models

The maintenance of three distinct hydraulic models: Riverine, Coastal and Alluvial Fan Flooding are needed on a routine basis. The creation of a tabletop model that communities and organizations can borrow are also needed. This task could be cost-shared with the Department.

Program Milestone: A meeting at least once a year to discuss plans for Tabletop models

Strategy: Determine the funding and time available for development of Tabletop models

Partnership: FEMA and a contractor

Performance Metric: Compare number of meetings and progress every year

Proposed Task 15 – Five-Year Floodplain Management Plan Update

Annual update of the Five-Year Floodplain Management Plan is needed, especially due to the State Legislature's heighted awareness of flood-related activities.

Program Milestone: Review the State Floodplain Management Plan at least once a year

Strategy: Prior to the start of the new CAP contract, review and update the Floodplain Management Plan, as needed

Partnership: FEMA

Performance Metric: Compare the number of Floodplain Management Plan review per year

Proposed Task 16 – Develop New Workshops

The Department is in the process of developing two workshops: the CRS and Approximate A Zone Workshops to be presented to communities. A floodplain management workshop for State Agencies may also be developed.

Program Milestone: Complete and prepare the CRS and Approximate A Zone workshops for public presentation by 2006.

Strategy: Review and refine the CRS and Approximate A Zone workshops in 2005 and have at least one developmental meeting with ISO and FEMA.

Partnership: FEMA and ISO

Performance Metric: Compare number of CRS and Approximate A Zone workshops per year

Proposed Task 17 – Implement Items requested by FEMA in the Five-Year Floodplain Management Plan

The Five-year Floodplain Management Plan includes seven additional activities that FEMA requests each State to track. The activities include:

1. Contact each community with new maps to adopt to maintain or improve the percent of communities receiving new maps that adopt the map by the FIRM effective date, and increase the percentage of communities that adopt new maps prior to the 30-day letter being sent.
2. Create an "NFIP community" packet, especially for new NFIP communities or Floodplain Administrators
3. Contact new NFIP communities and possibly use the Community Assistance Contact process
4. Record number of NFIP violations in CAVs to determine improved floodplain management compliance by 10 percent in FY 2009
5. Record number of communities that adopt model ordinance, and maintain the number of communities that have adopted the State model ordinance, or have adopted a stand-alone ordinance that meets or exceeds the standards on the State model.

6. Analyze number of attendees at workshops
7. Quantify and classify Technical Assistance, and record in CIS when the option is available

Program Milestone: Implement items in the FY 2005 CAP Contract with FEMA.

Strategy: Summarize the items requested by FEMA and disseminate the information to the Headquarters and District offices. Develop templates to record each new activity and disseminate.

Partnership: DWR District Offices

Performance Metrics: Each year, evaluate number in each activity per year

1. Compare the number of communities receiving new maps with how many adopted the new maps and have compliant ordinances, and compare the percentage of communities in FY 2004 that received a 30-day letter, with the number in subsequent years.
2. Compare the number of NFIP community packets given to new NFIP communities or Floodplain Administrators, with the number in subsequent years.
3. Compare number of new NFIP communities contacted, possibly by the CAC process, with the number in subsequent years.
4. During CAVs, record the number of NFIP violations (as a percentage of the total number of buildings evaluated). Compare this percentage with the number of violations discovered in subsequent years and then, decrease baseline by 10 percent by FY 2009. Develop a State violation baseline and compare the percent of LOMC violations in FY 2005 with numbers in subsequent years.
5. Compare the FY 2004 number of communities that have adopted the latest model ordinance, with the number in subsequent years.
6. Analyze number of attendees (local officials, surveyors and engineers) at workshops and compare number in subsequent years.
7. Document all general technical assistance calls, when the option is available in CIS, and if possible, categorize the type of calls (mapping, flood insurance, etc.) and the constituent group (local government, citizen, etc.)

Proposed Task 18 – Develop Lists of Pre-Disaster Mitigation Plan Projects/ Increase Number of Mitigation Grant Applications

California can take advantage of Hazard Mitigation Grant Proposal and Pre-Disaster Mitigation funding by developing lists of viable HMGP and PDM projects. The Department will work with counties to develop lists of HMGP and PDM projects.

Program Milestone: Develop lists of fundable projects eligible under the Hazard Mitigation Grant Proposal and Pre-Disaster Mitigation programs by December 2005 and increase the number of HMGP projects and PDM applications.

Strategy: Schedule semi-annual "Brainstorming" meetings

Partnership: FEMA Region IX and OES

Performance Metric: Compare number of HMGP and PDM applications and fundable projects per year

Proposed Task 19 – Assist in the selection of CAV communities

Since DWR is aware of the communities that need to be CAVed, DWR would like to be involved in the selection process.

Program Milestone: DWR will assist FEMA in selecting communities to be CAVed and use the following criteria:

- new local floodplain administrators
- interested in the CRS Program
- in federal disaster areas
- have been flooded

Strategy: In August of each year, send a list of communities, with justification information, that support why a community should be CAVed to FEMA. Each DWR office should create a list throughout the year of communities that need to be CAVed.

Partnership: FEMA

Performance Metric: Compare number of communities selected by DWR

Proposed Task 20 – Implement 20 percent of Floodplain Management Task Force Recommendations

The 2002 California Floodplain Management Task Force report developed 38 recommendations. Over 5 years, DWR hopes to implement at least 20 percent of the recommendations with FEMA's support.

Program Milestone: Work on Floodplain Management Task Force issues, such as:

- # 5 – Alluvial Fan Task Force
- #7 – Reduce Repetitive Loss
- #10 – 1 foot above the Base Flood Elevation
- #11 – Executive Order
- #12 – State Multi-Hazard Mitigation Plan
- #14 – State Building Codes
- #25 – Training and Education
- #33 – Schools following NFIP

Strategy: Identify workplan and schedule meetings for each of these recommendations

Partnership: FEMA, State Agencies and Building Code Officials

Performance Metric: Compare amount of time spent on Task Force recommendations per year

LIST OF NON-FUNDABLE FLOODPLAIN MANAGEMENT PROGRAM ACTIVITIES

The following is a brief description of other activities in which DWR participates:

Proactive Activities

- Participation in State and national Floodplain Management Associations, including on the executive boards and conference committees
- Develop Levee Flood Zone
- Develop State Strategic Plan for Flood Loss Reduction entitled "FLOOD WARNINGS: Responding to California's Flood Crisis."
    - Provide assistance in developing details for the State's Strategic Plan, including the Central Valley Flood Control Assessment District
- Complete and present Comprehensive Floodplain Management Reference Manual workshop
- Maintain Flood Map Library, including Letter of Map Changes, Flood Insurance Rate Maps and Flood Insurance Studies
- Review Environmental Impact Reports and write comment letters affecting floodplain development

Elevated Participation in Floodplain Management Associations

National

- Region IX Director on Association of State Floodplain Managers' Executive Board in FY 2004-2005
- ASFPM's Technical Program Chair for the national conference in Madison, Wisconsin in FY 2005
- Panel Discussion Member on National Academy of Science at the first annual Gilbert F. White National Flood Policy Forum in Washington, D.C. in 2004

Regional

- Ex-Officio member on Floodplain Management Association Executive Board
- Member of Floodplain Management Association Conference Committee
- Floodplain Management Advisory Group

MAP MODERNIZATION IMPACTS

Due to increased mapping and levee identification efforts, there will be an increase in technical assistance inquiries. The increase in mapping technical assistance due to Map Modernization will be addressed through our Mapping Section. The branch is requesting additional staff, as well as hiring a new contractor in 2005 that will assist with Mapping and Floodplain Assistance tasks.

SUPPLEMENTARY ACTIVITIES AND BALANCING WORKLOADS

The Floodplain Management program believes that alliances with Floodplain Management groups benefit the overall mission. At this time, the staff will be involved with the following worthwhile external projects, which will affect the Department's workload:

- New Elevation Certificate - Changes to Workshop
- ASFPM 2005 Technical Program Chair
- FMA 2005 Conference Committee
- Presentations at Out-of-State Floodplain Management Associations, Community Rating System Task Force, and related associations regarding California's Floodplain Management Program and proactive activities

NEEDS ANALYSIS AND GAP ASSESSMENTS

PLANNED ACCOMPLISHMENTS ACCORDING TO AVAILABLE FUNDING

The Floodplain Management program is allocated about $1Million annually, of which over $400,000 is given by FEMA through its Community Assistance Program. The remainder of the funding, $600,000, is from the State's general fund. The total amount of the CAP contract, including the State's 25 percent cost-share is $547,400.

GAP ASSESSMENT

Given the fundable activities versus the total amount in the CAP contract, the average GAP Analysis per Fiscal Year is $260,000. This includes an estimated funding of 2700 hours per fiscal year to meet the current demand.

OPTIONS

Due to changes in trained personnel, there have been concerns with the increased workload on existing staff. Two options are to obtain new Department NFIP positions, which require hiring time and additional training, and to contract out the Community Assistance Visit work to consultants. The Flood White Paper includes a recommendation to the Legislature to increase Floodplain Management's budget. However, we will not know if the budget augmentation will be approved until FY 2006-07. Also, the contracting option will need to be fully assessed and discussed with FEMA before implementation.

ORDINANCE ASSISTANCE REQUIREMENTS THROUGH FFY 2009

At this time, the Department is still determining the status of the "Automatic Adoption Clause." This will determine the Ordinance Assistance Requirements through FFY 2009. Within each CAV, the State reviews the community's floodplain management

ordinance. According to the current CAP Contract, the Department conducts 52 CAVs per year and thus, conducts 52 ordinance reviews.

The Department conducts additional Ordinance Reviews as-requested by FEMA.

MULTI-HAZARD IMPLEMENTATION PLAN

In 2003 and 2004, the Department worked with the Office of Emergency Services in developing the State's Multi-Hazard Mitigation Plan. The Department will continue to participate on the Plan's committee, by meeting quarterly, to update the material and discuss the implementation plan. OES is working on an Enhanced Multi-Hazard Mitigation Plan.

In FY 2004-05, the DWR's Economics group in conjunction with Floodplain Management Branch will be developing a Comprehensive Floodplain Management Reference Manual, which will include multi-objective approaches to floodplain management on a watershed basis. The information in this plan could assist in the multi-hazard mitigation plan update.

MAP MODERNIZATION ACTIVITIES

According to the Department's "Flood Map Modernization State Business Plan" dated May 2004, under *Goals and Issues – Mapping Business Plan Implementation* (page 46): "The State of California has proposed an ambitious floodplain mapping business plan with 5-year and 10-year objectives to complete the digital conversion of all existing flood insurance rate maps, complete 20,000 stream miles of approximate floodplain maps and a minimum of 5,000 stream miles of detailed floodplain studies."

Specifically, as stated in the Mapping Business Plan's *Planned Accomplishments* (page 34), DWR plans to achieve the following after five years (with full funding and full cost-sharing from FEMA):

- Complete 5,000 miles of new or updated floodplain mapping for the State's most critical rivers and streams.
- Digitize all existing flood insurance rate map panels in California.
- Complete 10,000 miles of Awareness Floodplain Maps. This is half of the number required to map the remaining 20,000 critical unmapped stream miles in California.

The Mapping Assistance activities as stated in the CAP Guidance Document as, "participate in the development of mapping priorities, the scoping of studies, and in community meetings held as part of the mapping process in coordination with the CAP-MAP Business Plans" will be handled by the Branch's Mapping Section.

MAP MODERNIZATION BUSINESS PLAN INTEGRATION

Both the Floodplain Assistance (NFIP activities) and Mapping Sections are within the Floodplain Management Branch, which is under the State NFIP Coordinator, Ricardo

Pineda. Thus, the Floodplain Assistance and Map Modernization activities will be integrated. An example of integration between the Floodplain Assistance and Mapping Sections is information from CAVs can assist in prioritizing where to conduct mapping studies (see below).

Performance Measure – Map Adoption by Communities

It is the intent of the Floodplain Management Branch to ensure that all communities are aware of the need to adopt the new maps. The demand for contact with each community will depend upon the number of communities with a restudy, but not receiving a CAV that year.

Planned Restudies and Ordinance Assistance

In order to integrate with the Map Modernization Business Plan, the State can focus on conducting CAVs in the same general area as the new mapping studies and restudies.

In California, the Fiscal Year 2005 new/restudies priorities will focus on the Feather River system and Lower San Joaquin River system. These two systems are in the Counties of Yuba and Sutter. Overall, future mapping priorities would be given to:

1. Central Valley
2. Feather River System
3. Lower San Joaquin River System
4. Leveed Urbanized and Developing Areas
5. Remainder of Areas

SUPPORT OF MAP MODERNIZATION

The Department as well as the Floodplain Management program fully supports Map Modernization, as outlined in its Mapping Business Plan. The importance of floodplain mapping has received an increased amount of attention in recent years. This is due to an elevated awareness at the Governor's level, especially about the amount of funds that can be leveraged; recent media coverage of the State's flood status; recent State flood events; and discussion in the California Floodplain Management Task Force report.

ACTIVITIES TO PROMOTE MAP ADOPTION BY COMMUNITIES

In order to promote map adoption by communities, the Department will contact those communities that need to adopt new maps, when the Department receives notification from FEMA. FEMA usually mails the notification letter to the community approximately one to three months prior to the Effective Date. Also, the Floodplain Assistance group will ensure that the "Automatic Adoption Clause" is present in each NFIP community's floodplain management ordinance. A third activity will be to discuss map adoption on the Branch's webpage.

OUTREACH STRATEGY TO ENROLL NEWLY MAPPED COMMUNITIES

The Department can work with FEMA in developing a "NFIP Community" packet, which would include NFIP material, the Department's list of NFIP-related workshops and contacts. Within each packet, the newly mapped community would be encouraged to attend the Department's free training workshops, which currently include: Basic NFIP, Substantial Improvement/Substantial Damage, Elevation Certificate and Approximate A Zone. A Community Assistance Contact could be conducted for each newly mapped community, if requested by FEMA.

CONCLUSION

California's Flood Management Program has unique characteristics, such as Oroville Dam, California Data Exchange Center, a co-located Joint Operations Center and coordinated reservoir operations.

California's Floodplain Management Program has proactive activities such as the California Floodplain Management Task Force report, development of hydraulic models, and training workshops.

Overall, the following situations will guide the direction of California's Floodplain Management Program: the Paterno case and Legislative decisions, influx of mapping funds and the ability to map the entire state, minimization of hiring freeze impacts and the hiring of new staff.

There are many upcoming changes to California's floodplain management program. If funded, the Alluvial Fan Task Force will provide a model for other local entities faced with this type of diasterous flooding. This five-year floodplain management plan provides strategic guidance to respond to California's flood challenges.

APPENDIX D – List of Referenced Websites

Department of Water Resources	http://wwwdwr.water.ca.gov
Division of Flood Management	http://www.dfm.water.ca.gov
Floodplain Management Branch	http://www.fpm.water.ca.gov
California Data Exchange Center	http://cdec.water.ca.gov
California Floodplain Management Task Force	http://fpmtaskforce.water.ca.gov

Flood Emergency Action Team Report
http://rubicon.water.ca.gov/FEATReport120.fdr/featindex.html