Changing Decades, New Challenges



FISCAL YEAR 2010 REPORT TO THE COMMUNITY

Sustainable Flood Control Management Responsible Environmental Restoration Clean Water Collaboration







Daniel Woldesenbet, Ph.D., P.E.
General Manager of the Alameda County Flood
Control and Water Conservation District and Director
of the Alameda County Public Works Agency

Message from the General Manager

The Alameda County Flood Control and Water Conservation District (the "District") reports regularly to the community on its finances and the important work undertaken to protect Alameda County residents and businesses from flooding. This report covers fiscal year 2010 (July 1, 2009 to June 30, 2010).

The District has planned, designed, built, and operated Alameda County's flood control infrastructure for the past 60 years. We have a deep knowledge of Alameda County's hydrology and flood control systems—and a unique perspective on the county's needs. However, we are facing unprecedented and complex challenges in the decade ahead.

Aging Infrastructure

Most flood control infrastructure in western Alameda County is 50 to 60 years old. We have been diligent about maintaining and upgrading our infrastructure over time. However, some is simply nearing the end of its useful life, and requires major rehabilitation or replacement.

A Weak Economy

In an economy that's been called the worst since the Great Depression of the 1930s, the District has been and will continue to be extremely vigilant about its financial resources. The District prudently saves a small portion of its revenues every year to build reserves for major projects. Because of these reserves, the District has been able to carry out planned projects, despite the economy.

The District has also stretched to cover the cost of unplanned projects, such as the Federal Emergency Management Agency's (FEMA) levee evaluation and certification program, which began in 2007.

The good news is that our projects are creating jobs for engineers, local contractors, and others. In this competitive market, construction bids are lower, which offers good value to Alameda County taxpayers.

The impact of this tight economy will have delayed consequences. About half of the District's revenue comes from property taxes. Because property values have declined, this source of revenue is being eroded. Interest collected on invested revenue is also down—sharply.

More Stringent Flood Protection Standards

FEMA is taking steps to increase flood protection standards across the country. FEMA now requires major drainage facilities to protect against a flood that has a 1 percent chance of occurring in any given year (also known as a 100-year flood). FEMA and the

District are identifying areas that do not meet the new standard. Many new flood control improvements will be needed in those areas.

Levee Evaluations

After the levee failures in New Orleans during Hurricane Katrina, FEMA established a nationwide plan to improve levee safety. This involves evaluating levees and making improvements, where needed.

Many levees in Alameda County were built decades ago, and may not meet new FEMA standards. Levee repairs and certification are expensive, but necessary.

Global Warming

The future impacts of global climate change on the San Francisco Bay Area are not fully known. However, most scientists agree that the Pacific Ocean's water level is rising and weather patterns are shifting. We are looking ahead at how this might change the way water flows through our creeks and channels. In the meantime, we are doing our part to support the Alameda County Climate Action Plan.

There is no doubt that difficult and expensive decisions lie ahead. The District will continue to work with federal, state, and local agencies and conservation groups. We'll apply our knowledge, foresight, and hard work toward protecting Alameda County citizens and businesses against flooding, while safeguarding the celebrated beauty of the Bay Area's natural environment.

Sincerely,

Daniel Woldesenbet, Ph.D., P.E.



About the District



The Alameda County Flood Control and Water Conservation District provides flood protection for Alameda County.

We plan, design, construct, and maintain flood control projects such as natural creeks, channels, levees, pump stations, dams, and reservoirs. Our overarching mission is to support the public safety, health, and welfare of the residents and businesses of Alameda County.

We act as an environmental steward by engaging in projects that protect and improve natural

surroundings. We also administer a program to decrease contamination in Alameda County waterways, all of which eventually flow to the San Francisco Bay.

The District was created in 1949 at the request of county residents. The District is a completely separate legal entity from the County of Alameda and the Alameda County Public Works Agency, although we and the Public Works Agency share staff committed to delivering high-quality, effective service to the public.



In addition to its scenic beauty, Lake Elizabeth serves as a flood control reservoir in Fremont (Zone 6).

FISCAL YEAR 2010 Accomplishments to Celebrate

- Designed and put out for construction 11 capital improvement projects worth \$16.2 million. Projects include restoring creeks and their banks, improving levees, removing silt from channels, and increasing flood-carrying capacity.
- Obtained a \$360,000 grant from FEMA to begin a study about the effects of extreme tides and sea level rise.
- Obtained a \$595,000 grant from the California Department of Water Resources through the Local Levee Assistance Program (Proposition 84 of 2006) to evaluate whether the District's levees meet new FEMA levee standards.
- Managed 10 restoration sites created to offset the impacts from other flood control and roadway construction projects.



Flood Control Zones of Alameda County



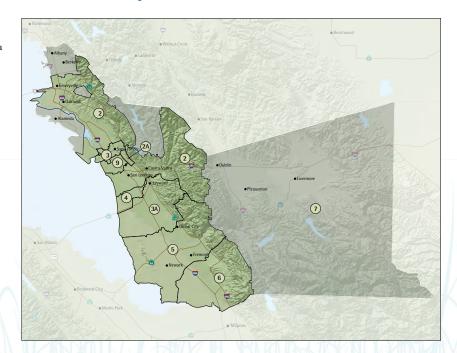
There are nine zones—2, 2A, 3A, 4, 5, 6, 9, 12, and 13—within western Alameda County that comprise the area

served by the District. Zone 7, which covers eastern Alameda County, is administered by the Zone 7 Water Agency.

The boundaries of these zones correspond roughly to watershed boundaries.

By the numbers, we manage approximately:

- 193,101 acres
- 202 miles of natural creeks
- 85 miles of earthen channels
- 40 miles of concrete channels
- 232 miles of underground pipe
- 12 miles of improved channels
- 22 pump stations
- 5 reservoirs





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Key Projects in Fiscal Year 2010

Improving Our Levees



The District has worked with FEMA since August 2007 to re-evaluate and analyze miles of levees according to new

FEMA requirements. During fiscal year 2010, we issued three contracts valued at \$7.4 million to firms with the technical expertise needed to continue the levee studies.

We're in the process of making major improvements to three levees. Construction is underway on the King and Lyons Creeks levee in Fremont. Construction will begin in 2011 on the Sulphur Creek levee in Hayward and Phase One of the 18-mile lameda Creek levee in Union City and Fremont. We have also been doing smaller projects to control seepage, repair erosion, and heighten some levees.



Installing a sheetpile wall to block seepage and stabilize the Alameda Creek levee.



After evaluation, levees along the Alameda Creek in Fremont (Zone 5) are being repaired.

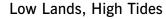




(meaning a flood has only a 1 percent chance

review of a Bay Area regional tidal study to

study of Alameda County. Following evaluation and analysis, a final coastal report will be issued in 2013.





Scientists believe that there is a global warming trend and that sea levels may rise. Even small increases in sea level

may have large impacts on the low-lying San Francisco Bay shoreline of Alameda County.

FEMA is studying the effects of sea level rise on Bay Area shorelines, creeks, and levees. The goal is to determine what changes may be needed to provide a 100-year level of flood protection of occurring in any given year).

The District is actively participating with FEMA in two studies. We are doing a peer assess modeling techniques and results achieved. The regional study will be completed in 2011.

We are also taking the lead in FEMA's coastal



Big Picture Plan with a 30-Year View

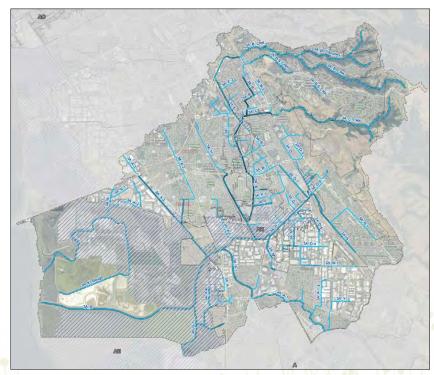
A comprehensive \$1.1 million drainage master plan was completed for Zone 3A (in Hayward and Union City) in fiscal year 2010. This area includes the lower reaches of Old Alameda Creek, a major waterway in Alameda County.

The master plan outlines nearly \$75 million worth of needed improvement projects and expected maintenance activities for the next 30 to 50 years. These improvements are needed to provide 100-year flood protection.

Once a 100-year flood protection level is reached, nearby properties can be removed from FEMA's designated Special Flood Hazard Areas, and owners will no longer be required to carry flood insurance.

Most projects are intended to increase the floodcarrying capacity of channels. Additional projects include evaluations and repairs to levees to meet FEMA's new levee standards.

A major project to control sediment deposits in the lower reaches of Old Alameda Creek near the San Francisco Bay is part of the plan. Another major project is a new 8-mile shoreline levee that will create a flood boundary between low-lying tidal areas and developed areas.



A lot of water flows through Zone 3A, roughly 19,700 acres in size, which extends from the East Bay hills to the San Francisco Bay, and encompasses portions of Hayward, Union City, and other unincorporated communities.





Nearly 5,500 acres of former salt ponds at Eden Landing will eventually be restored to wetlands in Hayward (Zone 3A), Union City (Zones 3A and 5), and Fremont (Zones 5 and 6).

Eden Landing Salt Ponds Restoration Project

The South Bay Salt Pond Restoration Project is the largest tidal wetland restoration on the west coast. The District is proud to be a major participant in restoring wetlands within the Eden Landing portion of the program (along the shorelines of Hayward and Fremont).

The District helped negotiate funding for the construction of Phase One, in which 630 acres of tidal marsh habitat will be restored by re-establishing tidal flow to former salt ponds at the eastern end of the San Mateo Bridge. When state bond money from Proposition 50 was put on hold indefinitely, we, together with our partners, found stimulus funds through the American Recovery and Reinvestment Act of 2009. Still, we came up \$800,000 short.

We devised a win-win solution—where the objectives of another project were met by con-

structing a portion of the Eden Landing project. Here's how it worked.

We had been planning a de-silting project along the lower reaches of Old Alameda Creek in Hayward. Because wildlife habitat and water quality would be impacted during dredging, we were required to offset those impacts by improving the environment elsewhere.

We agreed to fill a "borrow ditch," located within the Eden Landing Ecological Reserve, as the mitigation project. The borrow ditch was originally created when Cargill dug earth to build levees around the salt ponds.

We used the silt dredged from Old Alameda Creek to fill the borrow ditch, which will create a portion of the tidal marsh habitat for Phase One of the Eden Landing Salt Ponds Restoration Project.

FISCAL YEAR 2010 Accomplishments to Celebrate

- The District obtained a \$1 million grant for Alameda Creek fish habitat improvements and a 150,000 grant for a fish ladder.
- To improve both flood protection and the environment, a \$550,000 contract for engineering design services was initiated to restore creeks and habitat.
- The special design of a 14-acre restoration site near the salt ponds at the Eden Landing Ecological Reserve will provide habitat for the Salt Marsh Harvest Mouse, an endangered species.





Fish can't swim up or downstream over the concrete footings of railroad tracks and BART. The District is planning a new fish ladder over the barriers (Zone 5).

Stepping Up Plans to Restore Salmon to Alameda Creek



In 2008, steelhead trout spawned in the Alameda Creek watershed for the first time in nearly 50 years!

Building a fish ladder over the remaining barriers within Alameda Creek—concrete footings of B RT and Union Pacific Railroad tracks—is sure to help steelhead trout and salmon swim upstream and spawn, just as they did before the barriers were built. Three dams—Sunol, Niles, and an inflatable dam—have already been removed.

One important consideration is making sure there is enough water in the creek for the fish. To increase the water level, other barriers in the creek will need to be removed. The San Francisco Public Utilities Commission, owners of a reservoir in the upper reaches of Alameda Creek, have agreed to allow more water to flow down the creek.

A plan to plant new vegetation for shade along the edges of the fish ladder is also being developed. If all of these issues are cleared up in 2011, construction of the ladder could begin in 2013.







Before and after images of Agua Caliente Creek in Fremont show the huge improvements in flood-carrying capacity (Zone 6).

A Long-Term Plan for Zone 6

A drainage master plan is underway for all of Zone 6 in Fremont—along with detailed hydrology and hydraulic studies—that will better identify flood control improvements needed to meet a 100-year flood level.

Some of the projects being studied include modifications to Lake Elizabeth and Laguna Creek that will improve stormwater flow. This, in turn, will lessen the number of nearby properties included in the FEMA Special Flood Hazard Areas. Once the projects are completed, property owners will no longer be required to carry flood insurance.

As part of the Eden Landing Salt Pond Restoration Project (described on page 8), existing levees that were part of the former salt ponds complex will be removed. To provide flood control between the restored wetlands and developed areas, the District is planning a new inland protection levee. The Newark–Fremont segment of the levee is planned to stretch between Highway 84 and Laguna Creek.

Helping the Endangered Jumping Frogs of Alameda County

G-10

The natural banks along Agua Caliente Creek, between Paseo Padre Parkway and Tumbleweed Common in Fremont

(left), were in bad shape due to years of heavy erosion. In a project that winds through the nearby neighborhood, the creek was realigned and widened, and creek bed and banks were stabilized.

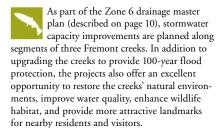
Creek habitat was improved for local wildlife—especially for the endangered *California Redlegged Frog*. Most of the existing large native trees were left intact. The area was landscaped with native plants, grasses, shrubs, and sycamore trees.



California Red-legged Frog



Making the Most of Creek Restorations



Before construction can begin in 2011, restoration designs must be completed and regulatory permits acquired. In fiscal year 2010, we worked to get approved designs and permits for restorations at Scott Creek upstream of Green Valley Road; gua Fria Creek between Highway 680 and Briar Place; and Line G creek, between Fremont Boulevard and Paseo Padre Parkway, adjacent to Grimmer Boulevard.

For the Scott Creek project, we will share the cost of improvements and maintenance with the Santa Clara Valley Water District. For the Line G creek project, we are working with the City of Fremont to develop a creekside trail that the public can enjoy.

The District's Clean Water Program

The District's Clean Water Program works to protect and enhance local creeks and watersheds. The program includes

monitoring and watershed assessment, and illicit discharge and connection inspection, as well as promoting watershed stewardship and water pollution prevention Best Management Practices in-house and to the community.

The Clean Water Program supports and participates in collaborative watershed stewardship efforts through the Alameda County Watershed Forum and other watershed community groups. Partnering with the City of Oakland to implement the Clean Creeks Program, which focuses

on the protection and enhancement of urban creeks, is another activity within the Clean Water Program's purview.

The Clean Water Program is also addressing the escalating trash problem in the District's channels through the Hot Spot Assessment and Clean-up Program.

The District is a co-permittee of the countywide <u>Clean Water Program</u>, a consortium that includes the 14 cities of lameda County, Unincorporated Area Alameda County, the District, and Zone 7 of the District.

FISCAL YEAR 2010 Accomplishments to Celebrate

- The District worked through the Bay Area Stormwater Management Agencies Association to secure a \$5 million U.S. Environmental Protection Agency grant to implement PCB and mercury reduction pilot projects.
- The District worked with the Association of Bay Area Governments to begin implementation of a \$5 million American Recovery and Reinvestment Act grant to install trash capture devices throughout the Bay region.
- As a deterrent to littering and polluting, installation of curb markers reading "No Dumping—Drains to Creek" was completed on 50 percent of Alameda County storm drains.



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Financial Overview—Fiscal Year 2010



The District undertakes a number of large and small projects every year to: 1) reduce the potential for local

flooding, 2) maintain the District's flood control infrastructure, 3) preserve the environment, and 4) prepare for each community's needs in the future.

Four District departments—Construction and Development, Engineering, Maintenance and Operations, and Management Services—work to meet these goals.

The figures and graphs on the following pages provide an overview of the District's sources of revenue and how the District allocates those funds toward flood protection and clean water in Alameda County.

Generally, revenue generated within a flood control zone can only be spent within that zone. Therefore, revenue and expenditure figures are presented for each zone separately. Note that Zone 7, while part of the District, is managed by the Zone 7 Water Agency.

Revenue to pay for projects is received from several sources:

Taxes: The District receives a very small portion of the 1 percent countywide property tax annually. However, a large portion (nearly 40 percent) of the funds earmarked for flood control is reallocated by law to the state's Educational Revenue Augmentation Fund (ERAF), not to flood control projects.

Aid from Government Agencies: The District applies for and receives federal and state grants for flood control and water quality projects.

Use of Money: The District receives interest on cash and emergency reserves, and rental revenue from District-owned property.

Assessment Revenue: The District receives property assessments moneys based on land use category and anticipated stormwater runoff from the property. These assessments have not increased since the early 1990s and cannot be increased without a vote of the community, in accordance with Proposition 218.

Other Revenue: Developers and builders pay permitting fees to the District. This category also includes other small sources of revenue.

Clean Water Program: The District receives a small amount of revenue from assessments on property within unincorporated Alameda County to cover the costs of the Clean Water Program.

Expenditures fall into the following categories:

Information Technology Improvements: Hardware and software purchases and support for District operations.

Administration: Human resources, accounting, and other office services.

Construction and Development: Permitting and technical assistance for new developments in unincorporated areas. Construction inspection, laboratory testing, and contract administration.

Engineering: Designing and securing clearance and permitting for construction of new flood control structures or upgrades to existing facilities.

Maintenance and Operations: Maintenance of the District's vast inventory of infrastructure, and operation of pump stations and other flood control systems.

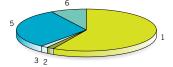
Clean Water Program: Activities associated with the District's responsibility as a co-permittee of the regional NPDES permit.

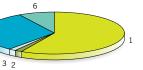


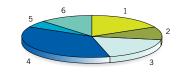
DISTRICTWIDE

From an accounting perspective, "Districtwide" covers general revenues and expenditures that apply to all zones.









REVENUES

	Total	\$ 4,051,907
6	Clean Water Program	337,020
5	Other Revenue	1,233,303
4	Assessment Revenue	0
3	Use of Money	65,526
2	Aid from Governmental Agencies	65,857
1	Taxes	2,350,201

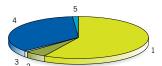
EXPENDITURES

1	Information Technology Improvements	965,751
2	Administration	(551,740)
3	Construction & Development	997,797
4	Engineering	2,005,872
5	Maintenance & Operation	287,197
6	Clean Water Program	657,797

\$ 4,362,674 Total

ALAMEDA FLOOD CONTROL ZONE 2



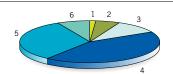


5 Other Revenue

6 Clean Water Program

REVENUES 2,734,572 2 Aid from Governmental Agencies 237,288 35,381 1,626,878 3 Use of Money 4 Assessment Revenue

\$ 4,693,801



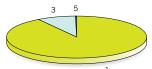
EXPENDITURES

59,682

1	Information Technology Improvements	102,310
2	Administration	370,143
3	Construction & Development	693,450
4	Engineering	2,911,629
5	Maintenance & Operation	2,180,899
6	Clean Water Program	500,670
_	Total	\$ 6,759,101

ALAMEDA FLOOD CONTROL ZONE 2A





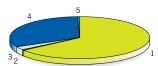
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REVENUES

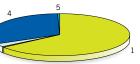
	Total	\$ 210 055		Total
6	Clean Water Program	0	6	Clean Water Program
5	Other Revenue	99	5	Maintenance & Operation
4	Assessment Revenue	0	4	Engineering
3	Use of Money	18,663	3	Construction & Development
2	Aid from Governmental Agencies	0	2	Administration
1	Taxes	191,293	1	Information Technology Improvements

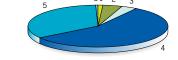
ALAMEDA FLOOD CONTROL ZONE 3A











REVENUES

	Total	\$ 4,632,328		To
6	Clean Water Program	0	6	Cle
5	Other Revenue	17,454	5	Ma
4	Assessment Revenue	1,462,608	4	En
3	Use of Money	124,274	3	Co
2	Aid from Governmental Agencies	18,797	2	Ad
1	laxes	3,009,195	1	Inf

EXPENDITURES

EXPENDITURES

onstruction & Development ngineering aintenance & Operation lean Water Program	3,952,153 2,367,624 21,963
ngineering	3,952,153
	,
onstruction & Development	255,925
1 1' 0 D 1 1	253,925
dministration	312,177
formation Technology Improvements	83,448



572 4,339

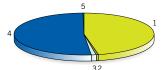
36,601 128,497 5,212 162 \$ 175,383

6 1



ALAMEDA FLOOD CONTROL ZONE 4





EXPENDITURES

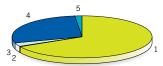
2		Total	\$ 557,239
0	6	Clean Water Program	3,436
9	5	Maintenance & Operation	93,822
0	4	Engineering	332,247
3	3	Construction & Development	54,473
7	2	Administration	52,685
23	1	Information Technology Improvements	20,576
	LA	I ENDITORES	

REVENUES

	Total	\$ 402,952		Tot
6	Clean Water Program	0	6	Cle
5	Other Revenue	269	5	Ма
4	Assessment Revenue	207,460	4	Eng
3	Use of Money	4,453	3	Cor
2	Aid from Governmental Agencies	2,647	2	Adı
1	Taxes	188,123	1	Info

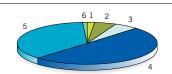
ALAMEDA FLOOD CONTROL ZONE 5





REVENUES

1	Taxes	5,119,201
2	Aid from Governmental Agencies	29,393
3	Use of Money	205,540
4	Assessment Revenue	2,145,051
5	Other Revenue	108,890
6	Clean Water Program	0
	Total	\$ 7,608,075



EXPENDITURES

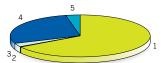
1	Information Technology Improvements	131,459
2	Administration	367,385
3	Construction & Development	429,025
4	Engineering	3,754,004
5	Maintenance & Operation	2,719,451
6	Clean Water Program	78,898
_		

Total \$ 7,480,222

61 2

ALAMEDA FLOOD CONTROL ZONE 6







EXPENDITURES





5,972

172,741

187,645

0

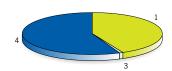
1,666,233

\$ 6,040,255

\$ 5,139,797

ALAMEDA FLOOD CONTROL ZONE 9





REVENUES

REVENUES

3 Use of Money

5 Other Revenue

Total

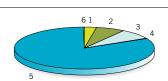
4 Assessment Revenue

6 Clean Water Program

2 Aid from Governmental Agencies

1 Taxes

	Total	\$ 432,113		Total
6	Clean Water Program	0	6	Clean Water Progra
5	Other Revenue	0	5	Maintenance & Ope
4	Assessment Revenue	242,497	4	Engineering
3	Use of Money	4,305	3	Construction & Dev
2	Aid from Governmental Agencies	0	2	Administration
1	Taxes	185,311	1	Information Techno



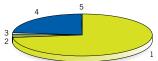
EXPENDITURES

_	Total	\$ 328.198
6	Clean Water Program	704
5	Maintenance & Operation	269,985
4	Engineering	417
3	Construction & Development	25,769
2	Administration	22,178
1	Information Technology Improvements	9,145

61

ALAMEDA FLOOD CONTROL ZONE 12





2 Aid from Governmental Agencies

EXPENDITURES

6,551,749

199,173

134,388

7,050

0

2,075,631

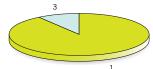
\$ 8,967,991



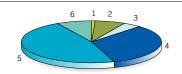
\$ 7,612,326

ALAMEDA FLOOD CONTROL ZONE 13









REVENUES

2

3 4 5

REVENUES

3 Use of Money

5 Other Revenue

Total

4 Assessment Revenue

6 Clean Water Program

1 Taxes

EVENUES	EXPENDITURES			
Taxes	655,759	1	Information Technology Improvements	4,001
Aid from Governmental Agencies	0	2	Administration	28,314
Use of Money	68,874	3	Construction & Development	16,799
Assessment Revenue	0	4	Engineering	131,845
Other Revenue	0	5	Maintenance & Operation	190,038
Clean Water Program	0	6	Clean Water Program	31,623
Total	\$ 724,633		Total	\$ 402,620





Contact Us

Alameda County Flood Control & Water Conservation District

399 Elmhurst Street Hayward, CA 94544-1395 (510) 670-5480 www.acpwa.org

Emergency

In case of emergency dial 9-1-1

For Assistance

Main Phone (510) 670-5480 E-mail us at info@acpwa.org Or visit us at www.acpwa.org

To Report Flooding of Major Creeks

In Alameda County (510) 670-5500 For sandbags in Hayward (510) 670-5500 For sandbags in Dublin (925) 803-7007

Services

To schedule building inspections (510) 670-5440 To report illegal dumping of trash in creeks (510) 670-5500

Para Asistencia en Espanol

Por favor llame a Lupe Serrano (510) 670-5993 Escribanos a la direccion de correo electronica info@acpwa.org O vistenos al www.acpwa.org

如有須要中文通話

須要廣東話或國語翻譯,請撥電話找程小麗小姐 (510) 670-5716 或 judy@acpwa.org 電聯請用 www.acpwa.org

FISCAL YEAR 2010 REPORT TO THE COMMUNITY



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Cover Photo: Hayward Regional Shoreline Park – East Bay Regional Park District Sidebar Photos (by page): 1: Contra Costa Goldfields (Lasthenia conjugens) – John Game 2: Water Droplets – PIER 3: Suisun Thistle (Cirsium hydrophilum) – Doug Wirtz 4: California Red-Legged Frog (Rana draytonii) – NPS/Kirke Wrench 5: Dandelion (Taraxacum officinale) – Gail Johnson 6: Snowy Egret (Egretta thula) – Noah Berger 7: Callippe Silverspot (Speyeria callippe) – Doug Wirtz 8: California Clapper Rail (Rallus longirostris) – Eco Images-Universal Images Group 9: Rainbow Trout (Oncorhynchus mykiss) – James Gritz 10: Frog on Leaf – Robert Marien/Corbis 11: Dandelion (Taraxacum officinale) – ULTRA. F 12: Birds on River Reeds – Jeanine Groenewald 13: California Golden Poppy (Eschscholzia californica) – David Gomez 14: Pine Tree Needles – fotoVoyager 15: Great Blue Heron (Ardea herodias) – Mark Kostich 16: Seaside Daisy (Erigeron glaucus) – Ruud de Man 17: Wood Duck (Aix sponsa) – R.L. Sivaprasad