

Up Close and Personal



To Serve and Preserve Our Community





County of Alameda / Public Works Agency / 339 Elmhurst Street / Hayward / CA / 94544

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**Fiscal Year 2006
Report to the Community**

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On the cover, left to right: ACFCF Staff Rohin Saleh, Mike Dutra, Manny Canivel, Ralph Johnson, and Tom Tidwell



DIRECTOR'S MESSAGE

The Alameda County Flood Control and Water Conservation District is proud of its efforts to help protect county residents and property from flooding. Each year, the District presents an annual report to summarize its activities and finances for the fiscal year. This report covers fiscal year 2006 (July 1, 2005 through June 30, 2006).

The District is the devoted steward of a valuable resource — a vast flood control infrastructure built in the mid-20th century. Thanks to this system of channels, pump stations, and other facilities, major flooding is a dim memory for even the longest-term residents.

Like a finely tuned machine, our infrastructure must be maintained over time. Occasionally, parts must be replaced. At other times, facilities must be upgraded to handle the demands of a growing community. In addition, new regulations prompted by recent disasters, such as the flooding following Hurricane Katrina, require agencies such as ours to make further upgrades. Each of these issues bears additional expense.

Most of our funds are accrued from a small portion of property tax revenues and, in some areas, a special benefit assessment. Budgeting requires careful planning because revenues collected in each geographic flood control zone can only be used for work within that zone. As an added challenge, about 40 percent of the funds collected and earmarked for flood control must be turned over to the state's Educational Revenue Augmentation Fund (ERAF). Yet the District remains dedicated to the upkeep of its flood control infrastructure.

“THE DISTRICT IS
HOME TO ANOTHER
VALUABLE RESOURCE –
ITS STAFF.”

The District is home to another valuable resource — its staff. Many of our employees have served the District for over 10, 20, even 30 years. They offer strong institutional knowledge and specialized expertise. Their skill sets grow to keep pace with the increasing environmental and community demands of today's flood control projects. As the District director, I applaud the commitment and skill of our staff. In addition to enumerating the successes of fiscal year 2006, this year's annual report will introduce you to a few of our many excellent employees. I hope you enjoy learning about their important work. Please be sure to visit the District's website to find out more about the District's operations, history, and special programs.

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



REACHING OUT FROM THE WEB

In recent years, the Flood Control District has provided information about its operations and history online rather than preparing and distributing printed reports. By eliminating costly printing and mailing, the District can dedicate more of its limited funds to flood control projects. In addition, while printed reports reached a relatively small group of citizens, online information can be accessed by almost anyone. Even residents who don't own computers can view the District's website at their local library.

More information is migrated to the District's Web site each year. Today, you can learn all about the District — its history, flood control zones, even notable employees — by going to www.acgov.org/pwa and following the link to "Alameda County Flood Control District."

Detailed information about the District's sources of revenue and its expenditures are also now on the website. Soon, visitors will see comprehensive sections about the rainfall and stream data collected by the District as well as an overview of the District's groundbreaking Hydrology and Hydraulics manual — a guideline for effective flood control design in the county.

A wealth of information is just a few clicks away!



MIKE DUTRA, Field Maintenance Superintendent

Mike Dutra still talks about February 1998. "El Niño that year started with one major storm, and it didn't stop for a month," Mike says. "We worked 24/7 handling local flooding, downed trees, and backed-up culverts. I've seen a lot of rain, but not to that degree!"

During potential flood situations, Mike serves as an incident commander. He mobilizes District crews and contractors, and even directs traffic if he has to. When the weather clears, Mike makes sure that needed repairs are made and waterways are cleared so that flood control channels and creeks don't get blocked.

Mike has weathered more than just storms during his 20 years with the District. He's seen the District's costs for garbage removal increase tenfold. He's grappled with environmental regulations that have grown more complex. He's worked with increasingly vocal citizens on District projects in their neighborhoods. But Mike

and his staff work hard to manage higher costs and community expectations.

He credits new technologies with helping him meet goals. For example, new software can help District staff schedule current and future preventive maintenance work while factoring in requests from the public. When flooding emergencies strike, state-of-the-art laptops and cell phones help shorten response time and facilitate better communication in the field.

Yet some things have never changed in Mike's tenure with the District. "Working in Maintenance and Operations means I spend just the right amount of time on office work and field work — indoors and outdoors. It's the perfect combination," he says.



FINANCIAL OVERVIEW: FISCAL YEAR 2006

Each year, the District undertakes a number of large and small projects to reduce the potential for local flooding, maintain the District's flood control infrastructure, preserve the environment, and prepare for each community's needs in the future. Three District departments — **Engineering and Construction, Maintenance and Operations, and Development Services** — work to meet these goals.

Projects are paid for by revenue received from several sources:

Taxes: The District receives a very small portion of the one-percent countywide property tax. However, a large portion of these funds are reallocated by law to the state's Educational Revenue Augmentation Fund (ERAF).

Aid from Governmental Agencies: Federal and state grants.

Use of Money and Property: Interest on cash reserves, rental revenue from District-owned property, and reserves used for emergencies such as major storm damage repairs.

Benefit Assessment Revenue: These assessments, based on land use category and anticipated stormwater runoff from the property, have not increased since the early 1990s.

Other Revenue: Fees paid by developers and builders, among other small sources of revenue.

Clean Water Program: Fourteen cities within the County of Alameda and the Zone 7 Water Agency provide funding to the Alameda Countywide Clean Water Program.

LEFT TO RIGHT: ►
ALAMEDA CREEK
ZONE 6, LINE 1, AND
CULL CANYON
RESERVOIR



Expenditures fall into the following categories:

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

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

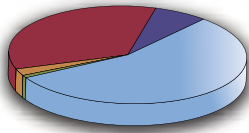
Development Services: Permitting and technical assistance for new developments in unincorporated areas.

Engineering & Construction: Design and construction of new flood control structures or upgrades to existing facilities.

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

Clean Water Program: Implementation of federal and state stormwater discharge permit requirements.

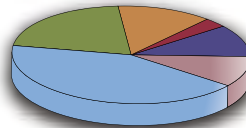
The following figures and graphs provide an overview of the Flood Control District's sources of revenue and how the District allocates those funds toward flood protection and clean water in Alameda County. Tax and benefit assessment monies received from properties within each flood control zone can only be spent within that zone. Therefore, revenue and expenditure figures are presented for each zone.



REVENUE FY 2006

Taxes	22,274,103
Aid from Government Agencies	152,865
Use of Money	2,407,227
Assessment Revenue	9,202,782
Other Revenue	1,417,570
Clean Water Program	1,696,549

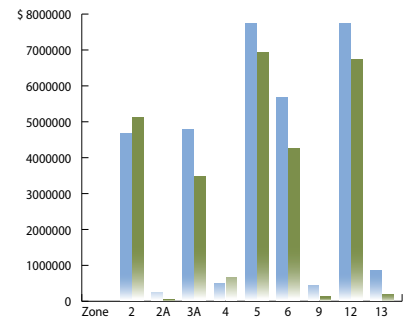
TOTAL \$ 37,151,095



EXPENDITURES FY 2006

Information Tech Improvements	1,681,522
Administration	4,572,720
Development Services	2,391,981
Engineering & Construction	11,864,661
Maintenance & Operation	10,318,678
Clean Water Program	4,480,267

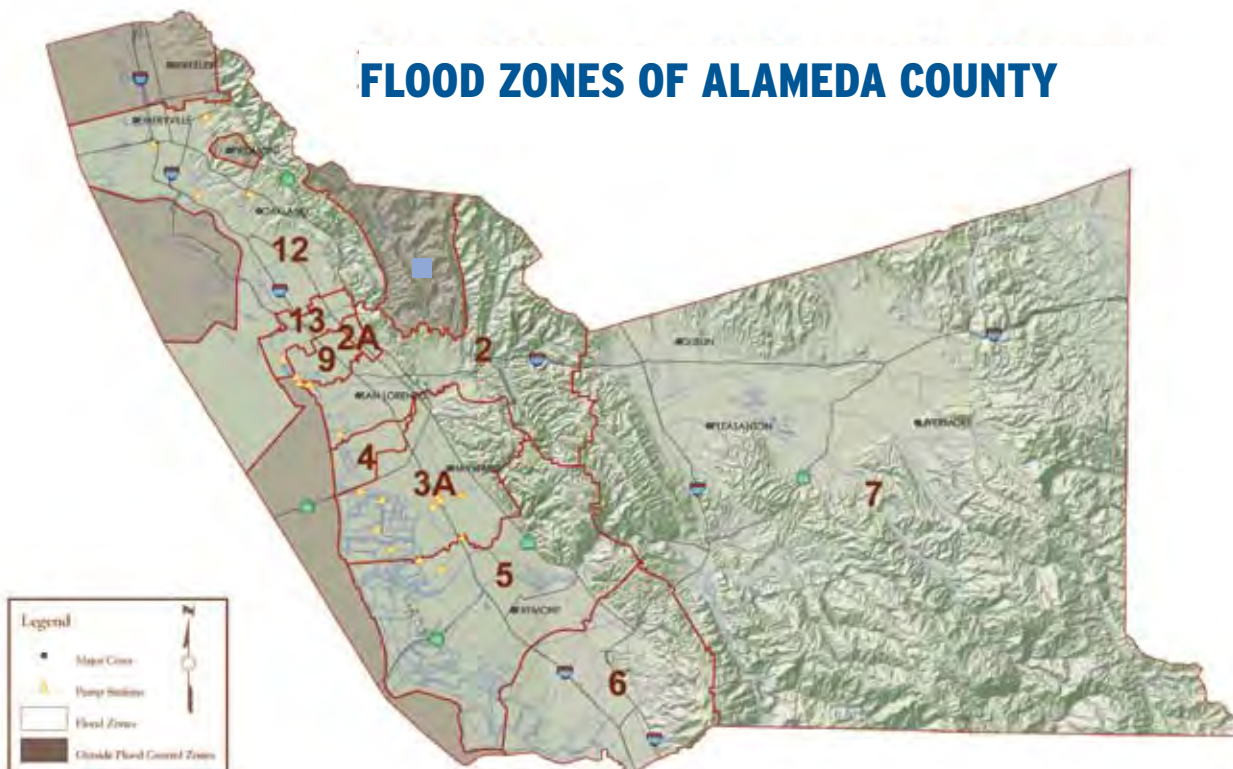
TOTAL \$ 35,309,830



■ REVENUE PER ZONE

■ EXPENDITURES PER ZONE

FLOOD ZONES OF ALAMEDA COUNTY



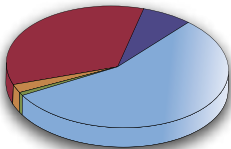


ZONE 2

REVENUE FY 2006

Taxes	2,575,595
Aid from Government Agencies	44,135
Use of Money	107,608
Assessment Revenue	1,606,239
Other Revenue	324,675

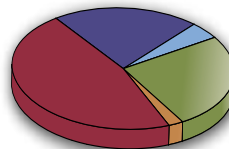
TOTAL \$ 4,658,252



EXPENDITURES FY 2006

Information Tech Improvements	157,999
Administration	540,030
Development Services	525,220
Engineering & Construction	2,151,947
Maintenance & Operation	1,074,503
Clean Water Program	651,588

TOTAL \$ 5,101,287

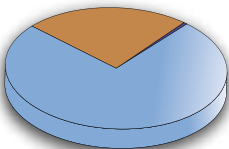


ZONE 2A

REVENUE FY 2006

Taxes	168,298
Aid from Government Agencies	0
Use of Money	53,763
Assessment Revenue	0
Other Revenue	995

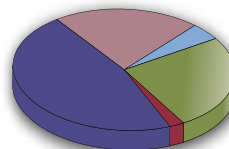
TOTAL \$ 223,056



EXPENDITURES FY 2006

Information Tech Improvements	863
Administration	4,949
Development Services	0
Engineering & Construction	429
Maintenance & Operation	9,004
Clean Water Program	4,122

TOTAL \$ 19,366

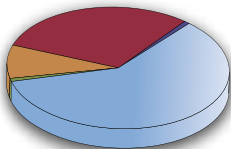


ZONE 3A

REVENUE FY 2006

Taxes	2,839,631
Aid from Government Agencies	39,351
Use of Money	415,698
Assessment Revenue	1,441,233
Other Revenue	26,551

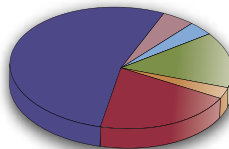
TOTAL \$ 4,762,463



EXPENDITURES FY 2006

Information Tech Improvements	126,877
Administration	508,874
Development Services	106,147
Engineering & Construction	710,680
Maintenance & Operation	1,833,494
Clean Water Program	156,747

TOTAL \$ 3,442,819

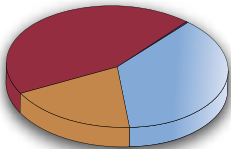




ZONE 4

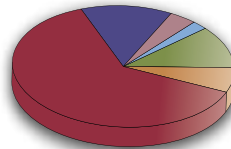
REVENUE FY 2006

Taxes	173,478
Aid from Government Agencies	0
Use of Money	85,321
Assessment Revenue	204,277
Other Revenue	85
TOTAL	\$ 463,161



EXPENDITURES FY 2006

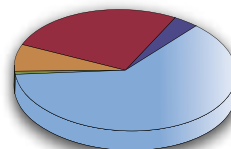
Information Tech Improvements	14,673
Administration	71,875
Development Services	44,563
Engineering & Construction	406,374
Maintenance & Operation	86,482
Clean Water Program	24,621
TOTAL	\$ 648,587



ZONE 5

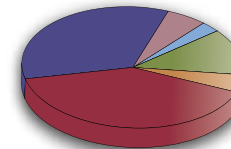
REVENUE FY 2006

Taxes	4,780,809
Aid from Government Agencies	64,591
Use of Money	570,760
Assessment Revenue	2,022,904
Other Revenue	268,059
TOTAL	\$ 7,707,122



EXPENDITURES FY 2006

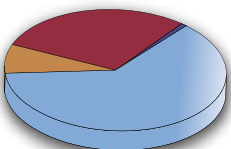
Information Tech Improvements	205,420
Administration	838,846
Development Services	336,400
Engineering & Construction	2,767,585
Maintenance & Operation	2,361,382
Clean Water Program	394,063
TOTAL	\$ 6,903,696



ZONE 6

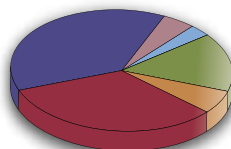
REVENUE FY 2006

Taxes	3,530,141
Aid from Government Agencies	1,328
Use of Money	425,030
Assessment Revenue	1,651,771
Other Revenue	42,482
TOTAL	\$ 5,650,753



EXPENDITURES FY 2006

Information Tech Improvements	139,824
Administration	647,239
Development Services	269,911
Engineering & Construction	1,381,589
Maintenance & Operation	1,588,717
Clean Water Program	193,224
TOTAL	\$ 4,220,505

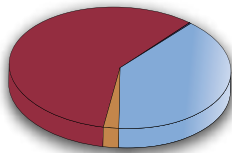


INDIVIDUAL DISTRICT ZONE REVENUES AND EXPENSES



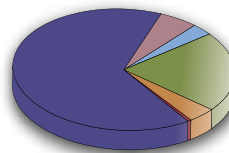
ZONE 9

REVENUE FY 2006

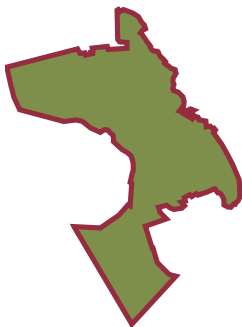


Taxes	161,746
Aid from Government Agencies	0
Use of Money	8,472
Assessment Revenue	240,278
Other Revenue	195
TOTAL	\$ 410,691

EXPENDITURES FY 2006

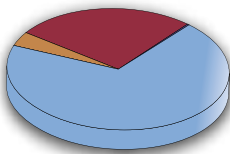


Information Tech Improvements	10,357
Administration	66,478
Development Services	13,340
Engineering & Construction	1,754
Maintenance & Operation	203,645
Clean Water Program	16,766
TOTAL	\$ 98,351



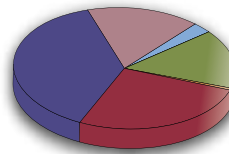
ZONE 12

REVENUE FY 2006



Taxes	5,384,159
Aid from Government Agencies	3,000
Use of Money	299,657
Assessment Revenue	2,036,079
Other Revenue	5,890
TOTAL	\$ 7,728,785

EXPENDITURES FY 2006

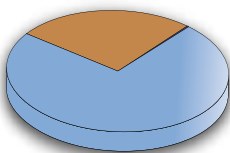


Information Tech Improvements	202,831
Administration	1,032,201
Development Services	39,131
Engineering & Construction	1,796,452
Maintenance & Operation	2,549,808
Clean Water Program	1,087,910
TOTAL	\$ 6,708,332



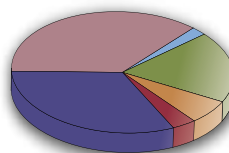
ZONE 13

REVENUE FY 2006



Taxes	615,725
Aid from Government Agencies	0
Use of Money	217,846
Assessment Revenue	0
Other Revenue	1,024
TOTAL	\$ 834,595

EXPENDITURES FY 2006



Information Tech Improvements	4,316
Administration	33,443
Development Services	11,456
Engineering & Construction	6,817
Maintenance & Operation	56,230
Clean Water Program	64,716
TOTAL	\$ 176,977



GENE MAZZA

Pump Station Supervisor

Gene Mazza has heard people in Alameda County say, "It never floods. Why do we need a Flood Control District?" Gene takes that statement as a compliment.

For instance, if his group didn't keep tabs on Lake Merritt during a rain event and pump off excess runoff, portions of Oakland could flood.

"When you hear the raindrops on your roof, we're awake and watching the situation," Gene says. "I still get pumped up going to work. I won't leave until that feeling goes away," he says.

Serving as a Marine Mechanic with the U.S. Navy and then working at the District since 1981 prepared Gene Mazza for every situation that could occur at one of the District's 22 flood control pump stations.

"Anything mechanical or electrical, I've learned as much as I can without becoming a white shirt engineer," Gene says.

Being a supervisor, however, brings new challenges to Gene every day. To become a good leader, Gene drew on his military experience and took night classes to further develop his management skills.

His staff supports him with a wealth of special knowledge in electrical wiring, welding, computers, pump machinery, and other fields. District engineers handle planning and funding details so Gene's group can focus on their job — preventing flooding when the rain starts.

"We all have different strengths. Collectively we can deal with all the repair and upgrade issues that come before us so that, bottom line, we can help protect residents and their property," Gene says.



“When you hear the raindrops on your roof, we’re awake and watching the situation ...

SUBSTANTIAL RESPONSIBILITIES ON A LIMITED BUDGET

In addition to the significant effort of maintaining the District's inventory of flood control channels, pipelines, pump stations, and other facilities, District staff handled a number of flood control upgrade and environmental projects in many of its zones. This report highlights these major projects, provides updates on projects started in fiscal year 2005, and looks ahead to fiscal year 2007 and beyond.

CHALLENGE AT CULL CANYON RESERVOIR



Zone 2 is home to two earth-filled dams used for both flood water retention and recreation. Since their construction in the early 1960s, Cull Canyon and Don Castro Reservoirs have offered popular hiking trails, picnic areas, and swimming facilities for the public.

However, time and nature have taken a toll.

Silt that flows into the reservoirs from surrounding streams has accumulated to a level that significantly reduces the reservoirs' capacity to retain stormwater. Cull Creek Reservoir, for example, contains over 400,000 cubic yards of silt — enough silt to fill nearly 2.7 million garbage cans!

Removing this much silt would cost approximately \$12 million and would require significant environmental impact mitigation. In other words, the District would have to pay for an upgrade project nearby to offset the potential effects that construction would have on the habitat resources surrounding the reservoir. Alternatively, the District would have to acquire a parcel in a mitigation bank equal to the impacted area.

Simply stopping the problem where it starts, by managing silt and sediment upstream near Columbia Drive before it reaches the reservoir, would cost about \$400,000 annually. The District does not have enough funding to remove the built-up silt and prevent future accumulation.

To further complicate matters at Cull Canyon Reservoir, a seismic study completed in fiscal year 2006 concluded that the dam is seismically unstable. The California Division of Safety of Dams (DSOD) has required that the District come up with short- and long-term solutions to mitigate the seismic instability of the existing dam. There is currently insufficient funding to perform any remediation work.

The District has explored several conceptual alternatives. Some alternatives would change the setting of the existing reservoir, which would eliminate some of the reservoir's recreational benefit to the community. The District has held several community meetings to

present the findings but no decision has been made on the final preferred alternative.

Until a permanent solution is selected, the water level at the dam has been lowered as required by DSOD to provide more freeboard (the difference in elevation between the top of the dam and the reservoir water surface). Increasing the freeboard will increase the safety factor for potential dam failure during a major seismic event. A more permanent seismic retrofit project will be included in the overall Zone 2 improvement needs.

Engineers will conduct community meetings in 2007 to present the conceptual alternatives, some of which would change the setting of the existing reservoir, which, in turn, would eliminate some of the reservoir's recreational benefit to the community. Once the community has adopted a final alternative, environmental documents will be prepared, environmental regulatory permits will be secured, and engineering design will follow. Construction of the project is anticipated to begin by spring or summer 2008.

CULL CREEK CANYON ►



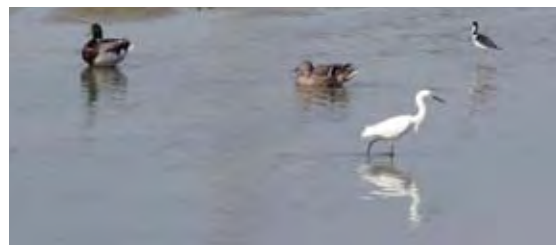
A REGIONAL WETLAND GOES FOR THE FLOW



The San Lorenzo Creek Wetland in Zone 2 is classified as a "muted tidal wetland." That means that water from San

Francisco Bay does not fully reach the wetland to support its unique plant, bird and fish habitats. The District wants to create changes that alter the flow of water from the Bay and enhance the natural habitat.

This kind of restoration project benefits the environment and provides needed mitigation for construction of future flood control upgrades. Improving the environment at one location in exchange for potential impacts to another habitat near a construction site balances out the overall effect on the region.



▲ WATERFOWL AND WETLANDS IN SAN LORENZO CREEK

A detailed report that describes the flow of water into the wetland and the water's effects on the environment was completed in fiscal year 2006. The District obtained a Coastal Impact Assessment Program grant to pay for this hydraulics and hydrology report, thus saving District funds for other flood control projects. Engineers will review the report results and determine how best to improve the wetlands in the near future.

LEVEE RESTORATION



Earthen levees protect communities from waters that rise in flood control channels during and after a rain event. However, levees can erode over time and reduce the level of flood protection once offered.

In Zone 3A, home to Union City and large portions of the City of Hayward, the District set out on a major project to restore the levee along Line A (remnants of Old Alameda Creek) from Hesperian Boulevard to I-880. Construction on this \$930,000 project began at the end of fiscal year 2006 and will be completed in fiscal year 2007.

For flood control facilities located within FEMA study areas, the District may design flood control features, when practical and feasible, to handle a 100-year storm: that is, a storm so severe that it occurs, statistically, once every 100 years. The levee upgrade project in Zone 3A, in fact, was designed to meet this high level.

For improvement projects such as this, District engineers utilize modern tools to study flood protection options. One of the most important applications to come on the scene in recent years has been Geographic Information Systems (GIS).



FISH TO THRIVE IN ALAMEDA CREEK



For over 8 years, the District has led the way in efforts to further enhance the natural habitat and restore steelhead trout to Alameda Creek in Zone 5, which includes Newark and portions of Fremont. District staff have worked collaboratively with the Alameda Creek Fisheries Restoration Workgroup a consortium including the Alameda County Water District (ACWD) and other utilities and agencies. Construction work to screen ACWD's largest diversion structure in the creek began in summer 2007 now that the water utility has received grant funds to pay for the work.

Building fish ladders in existing flood control channels remains the workgroup's top priority. A fish ladder helps the steelhead trout migrate upstream over manmade barriers so they can spawn. The fish ladders also help juvenile fish safely continue their natural life cycle down the stream.

The District has plans to build a fish ladder over the BART weir (a concrete structure in the channel that protects the footings of the BART tracks). However, this barrier abuts another barrier used by ACWD to divert water from the channel for storage. Therefore, building one ladder at the location would not help migrating fish. The District and ACWD are working out agreements to move forward with a fish ladder project that provides passage over both structures. They are also seeking grant funds to cover the cost of the project.

◀ ALAMEDA CREEK



ROHIN SALEH

Associate Civil Engineer, District Hydrologist, GIS Coordinator

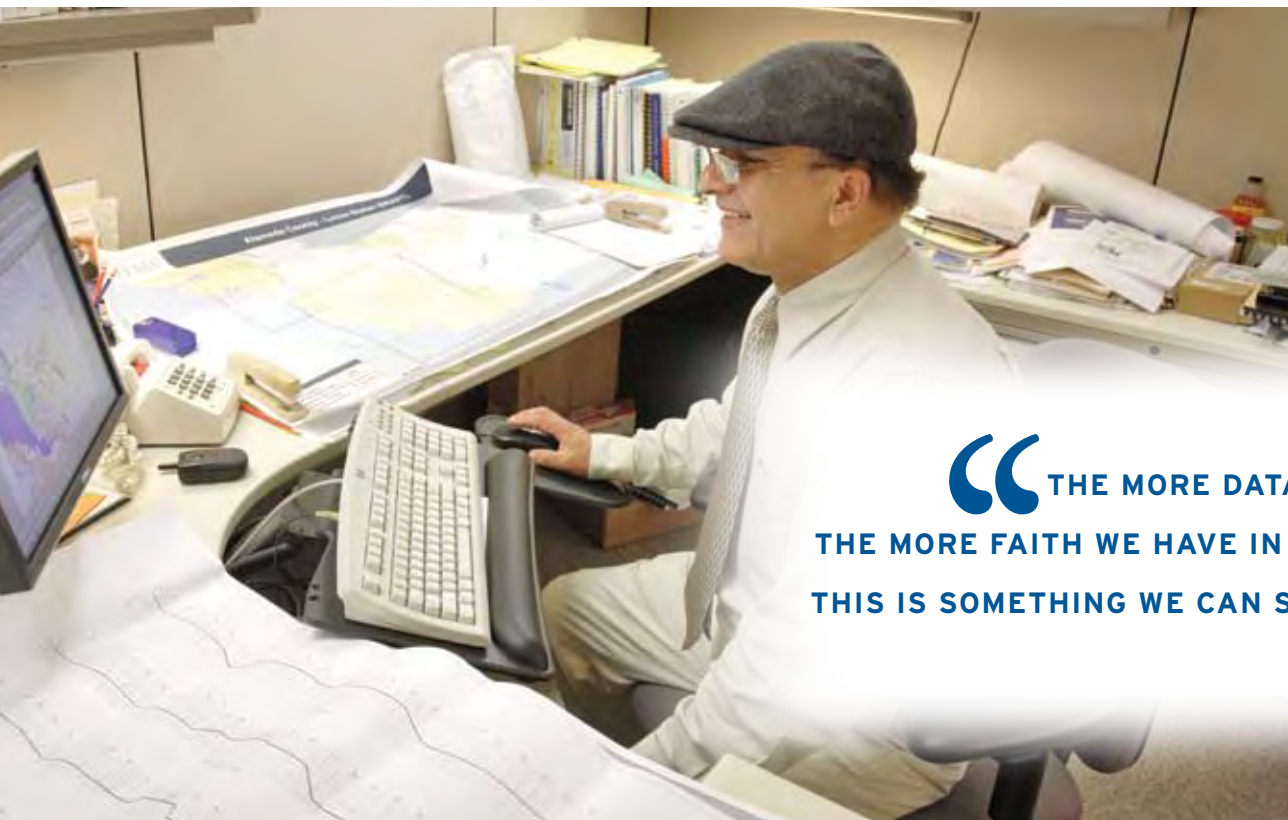
In the early days of Geographic Information Systems (GIS) — a means of digitally storing, managing, and analyzing data — Rohin Saleh understood the technology's potential benefits to the District. He knew that accurate, digital maps would vastly improve flood control project design. The images could also be shared with other District departments for overall cost savings.

However, consultants specializing in GIS charged hundreds of thousands of dollars to design tailor-made systems. So, Rohin took on the process himself. He built the District's GIS system over time, customizing it for flood control applications.

"My bosses, Scott Swanson and Hank Ackerman, trusted my initiative," Rohin says. "Today, the GIS applications we created and customized here are used countywide."

An early payoff for Rohin's efforts came in 1999. FEMA, the Federal Emergency Management Agency, generated new maps proposing that thousands of county citizens who had never had to buy flood insurance in the past may actually live in a flood plain. District staff believed FEMA's maps were not accurate in some locations but only had 90 days to appeal. Its GIS mapping, in addition to special stormwater flow studies, proved the District right. About 14,000 properties were saved from the expensive flood insurance requirement.

As the county hydrologist, Rohin has also introduced design criteria that are based on real-time observation of rainfall and storm water data rather than the traditional academic studies. He combined his Masters in Hydraulics and Hydrology with computer modeling experience to develop a model based on field data. This tool is proving helpful in the design of flood control upgrades.



“THE MORE DATA WE COLLECT,
THE MORE FAITH WE HAVE IN OUR DESIGNS.
THIS IS SOMETHING WE CAN STAND BEHIND.”

WETLANDS HABITAT AT EDEN LANDING



The District has actively pursued the restoration of large-scale wetlands at a 15,100-acre stretch of South Bay salt ponds that includes the 5,500-acre Eden Landing Complex in Alameda County. Once restored, the wetlands will attract migratory birds and provide habitat for threatened and endangered species. The public will also have access to view the wildlife and partake in recreational opportunities.

Besides renewing a portion of San Francisco Bay habitat, restoration of the ponds will improve flood management for the region. Two major flood control channels, Old Alameda Creek and the Alameda Creek federal project, about five and twelve miles long respectively, traverse the Eden Landing ponds. Once tidal flows are restored to the salt ponds, these channels will have greater stormwater flow capacity.

To that end, the District and the Santa Clara Valley Water District have represented the East Bay and South Bay flood control interests for the project. Other members of the South Bay Salt Pond Restoration Project team include the California Coastal Conservancy, the U.S. Fish & Wildlife Service, the California Department of Fish and Game, and the U.S. Army Corps of Engineers.

After several years of developing a long-term restoration plan, a draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) will be released in fiscal year 2007. A 30-member stakeholder forum including environmentalists, business owners, neighborhood groups, local elected officials, and others assisted in preparing the report.



▲ SOUTH BAY SALT PONDS

The draft report will include a 50-year long-range plan and a pilot testing phase in which selected Eden Landing Ponds adjacent to Old Alameda Creek will be restored to create approximately 730 acres of tidal salt marsh and tidal channel habitat. After this initial project, results at the ponds will continue to be studied to test the effectiveness of the restoration techniques.

The project team will review the success of creating a tidal marsh pond habitat, the influence of restoration on regional flood control, the rates and effects of marsh sediment build-up on tidal habitats, and the ecological value of the salt ponds. Lessons learned will be applied to the restoration of the entire 5,500 acre Eden Landing Pond complex. Initial construction work has been planned for summer 2008.



RALPH JOHNSON


Retired Employee

One doesn't see the words "retired" and "employee" together very often. But the Flood Control District has created a special classification to keep talented staff such as Ralph Johnson on hand.

Ralph spent 30 years at the District in a variety of roles from flood control design to groundwater management in Zone 7 to setting guidelines for new development in southern Alameda County. He took early retirement, but the District was not ready to let go of the man referred to as "Mr. History." So the District hired Ralph

as a provisional employee. These days, he works the equivalent of about one day a week. "That's just right for me," he says.

Ralph calls his current project, the South Bay Salt Pond Restoration, the most professionally satisfying yet. He appreciates the opportunity to coordinate efforts with federal and state agencies as well as other flood control districts and utilities. Most of all, he is excited to restore a key part of the bay.



**“THIS RESTORATION IS ESSENTIAL FOR
THE ECOSYSTEM. I BELIEVE THAT WE’LL
BE LEAVING THIS PART OF THE BAY
IN FAR BETTER CONDITION
THAN WE FOUND IT.**

BEST USE OF BUDGET



Growing Fremont neighborhoods in Zone 6 require the District to increase regional flood control capacities. One project, the Line I capacity improvement project running from Line E to the Southern Pacific Railroad, was designed for that purpose.

The original design called for construction of a reinforced concrete block floodwall to meet FEMA's 100-year storm event criteria. However, worldwide increases in steel and concrete prices led to construction bids far exceeding the available budget.



District engineers re-evaluated the design to determine less costly construction options that would achieve the same goal. They realized that they could raise portions of an existing roadway rather than replace sections of concrete floodwall to achieve the same level of flood protection as the original plan. As a result, they sliced the project budget nearly in half from \$1.2 million to \$614,000. Construction on the Line I improvements will begin in fiscal year 2007 and conclude in fiscal year 2008.

District engineers regularly solve design and budget issues by combining their engineering skills with hands-on knowledge of District infrastructure gained in the field. As a result, critical projects move forward. Some go even further to win coveted design awards.

▲ IMPROVEMENTS TO LINE I IN FREMONT

THE NATURAL SOLUTION



Zone 12, the City of Oakland's flood control zone, enjoys a number of picturesque urban creeks. These creeks provide flood control by conveying stormwater from the hills and residential areas out to the Bay. However, with growing development, construction access to the creeks can be difficult. In fact, many creeks are wedged between plots of private property.

An erosion and repair restoration project for a portion of Peralta Creek has proven difficult for that reason. In spite of the obstacles, development of a conceptual design began in 2006 to incorporate a number of natural elements such as vegetated soils and rock weir channel grade control structures.

The improvements will be constructed within the existing flood control easement boundaries. Additional easements may be required to implement the final design, if adopted as the preferred alternative. The estimated construction cost is \$1 million.



MANNY CANIVEL

Associate Civil Engineer

Before joining the District 20 years ago, Manny Canivel sat at a drafting table far away from the projects he had engineered. Now he plays a much more active role.

"At the District, you can see what you designed while it's under construction," Manny says. "You can't beat that for fulfillment. The work here is far more rewarding."


Rewards in a more tangible form have come to Manny and his projects as well. The Tule Pond Project in Fremont, which created natural ponds and wetlands for both environmental education and stormwater control, was named 1999's Project of the Year by the local chapter of the American Society of Civil Engineers. The restoration of Fremont's Mission Creek, which incorporated many natural construction materials, earned the 2004 Distinguished Project of the Year award from the Northern California American Public Works Association. The total construction cost was \$1.1 million, with

approximately \$727,000 paid for by state water resources grant funding.

In 2006, a large scale project to improve flood control on Lakeshore Avenue in Oakland was named a Distinguished Project of the Year by the Northern California American Public Works Association. The project required extensive business and neighborhood coordination, careful traffic management, and a special design to deal with area soils. The construction cost was \$7.8 million.

Manny credits the District's emphasis on teamwork with completing so many outstanding projects. He also has his own secret to success.

"You have to love your work, be focused, and be ready to learn. You can't stay in the past," he says.



“YOU HAVE
TO LOVE
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IN THE PAST.”

CLOSING THE LOOP

The District continued, or completed, several projects introduced in last year's annual report.

Zone 2: Line B Habitat Improvement, San Lorenzo Creek from Hazel Ave. to 2nd Street

District staff has coordinated regional efforts to restore a portion of San Lorenzo Creek from Hazel Avenue to 2nd Street, repair a deteriorating outfall structure at Sulphur Creek below the 2nd Street Bridge, and improve the habitat and public access at the site. Negotiations regarding maintenance and utility agreements for this project continue between the District, the Hayward Area Recreation and Park District, and the City of Hayward. A final agreement and start of construction are anticipated for fiscal year 2008.

Zone 4: Line A Confluence at Line E to Union Pacific Railroad (UPRR) channel

This embankment repair and capacity improvement project was delayed due to funding constraints and challenges involving right-of-way agreements. As a result, the project has been broken into two phases scheduled for construction in fiscal year 2007 and 2008: 1) a \$1.3 million project between UPRR and Cabot Boulevard, and 2) a \$600,000 project between Cabot Boulevard and Line E.

Zone 5: Line B Cherry Street Crossing Improvement

As part of the District's continuing work to improve the capacity of Line B and remove as many residents as possible from the requirement to purchase flood insurance, the District improved a channel crossing during fiscal year 2006 at the budgeted cost of \$415,000.

Zone 12: Ettie Street Pump Station, Pump No. 3 rehabilitation (\$98,000) and Line J Reconstruct In-line Flap Gate Structure (\$225,000)

These projects, which provided needed repair to aging flood control infrastructure, were completed in fiscal year 2006 as planned.

Line J Lion Creek Restoration Project demolition phase

The City of Oakland is finalizing the project design. The project scope, originally budgeted for \$250,000 is expected to change, and construction will likely begin in fiscal year 2008.

Zone 13: San Leandro Creek Restoration project

Lines of communication always remain open between the District and the non-profit Friends of San Leandro Creek, one of the most active habitat protection organizations in the East Bay. Although unscheduled at this time, the District looks forward to construction of an environmental education center associated with a creek bank stabilization and restoration project in the near future.





TOM HINDERLIE

Principal Civil Engineer in Maintenance and Operations

Tom Hinderlie joined the District in 1970 as an entry level engineer. Since then, he has progressed to upper management through a series of positions spanning every responsibility within the flood control organization. His work has touched on all aspects of creating and maintaining flood control infrastructure from the earliest planning efforts to day-to-day operations to ongoing repairs of aging machinery.


In one of his earliest projects, Tom played a significant role in upgrading a portion of the District's infrastructure that continues to offer protection today. He designed a variety of large flood control structures to minimize flooding at Oakland's Peralta Creek. At the same time, he planned and oversaw restoration work on the natural urban creek stretching above the new construction.

"Working at the District has given me the freedom to do design work and then follow it through to construction," Tom says. "Now, I'm able to see that the infrastructure is maintained, too."

Today, Tom leads nine pump station operators and another engineer in the Maintenance and Operations department. His group's number one goal is to stay ahead of any maintenance problems well before they happen so the pump stations run when they need to.

Tom's interest in his work has not diminished in four decades. He finds that each day brings a new situation in need of a solution.

"I've enjoyed the last 37 years and hope to enjoy a few more with the District," he says.



**“WORKING AT THE DISTRICT HAS
GIVEN ME THE FREEDOM TO DO
DESIGN WORK AND
THEN FOLLOW IT THROUGH
TO CONSTRUCTION.**

LOOKING AHEAD

In addition to ongoing and re-scheduled projects listed above, the following flood control projects are planned for fiscal year 2007:

Zone 2: \$ 500,000, Castro Valley Creek Restoration

\$ 260,000, Line B San Lorenzo Creek Trail (2nd Street to City Center Drive)

Zone 3A: \$ 600,000, Line A-5 Industrial Parkway to Catalpa pending watershed study results

Zone 5: \$ 60,000, Line B Access Road Restoration between UPRR and I-880

\$ 300,000, Line F-1 Filbert Crossing Improvement

\$ 400,000, Line F-1 Sycamore Crossing Improvement

Zone 6: \$ 600,000, Line I Capacity Improvement between Montrose and UPRR

\$ 25,000, Line D (near Briar Place) Storm Damage Repair

Zone 12: \$ 350,000, Line B-1 Quarry Pond Inlet Structure Modification

\$ 99,000, Ettie Street Pump Station Unit 1 Rehab

\$ 250,000, Line J improvements Coliseum Garden

\$ 90,000, Lake Merritt Pump Station Interior Crack Seal

DONALD LABELLE

A Good Steward

Although Donald LaBelle trained in city management, he found a niche in public works early in his career.

"In public works, you plan the projects, you build them, and then you dedicate them to the community," he says. "Public works projects are what make it possible for people to live in concentrated areas."

After serving agencies in Seattle, Washington; Fort Worth, Texas; Norman, Oklahoma, and other cities, an enticing opportunity arose in 1989. Alameda County, with its urban center in the west and semi-rural area in the east, presented an attractive blend of management issues to Donald. He came to Alameda County as Public Works Director, and as such, was also the Engineer Manager of the Flood Control District.

During his 17-year tenure at the County, he focused on the need to maintain and upgrade infrastructure, in particular the county's transportation system, streets, and flood control system.

"In Alameda County as in many parts of the country, infrastructure is reaching the end of its life cycle. The

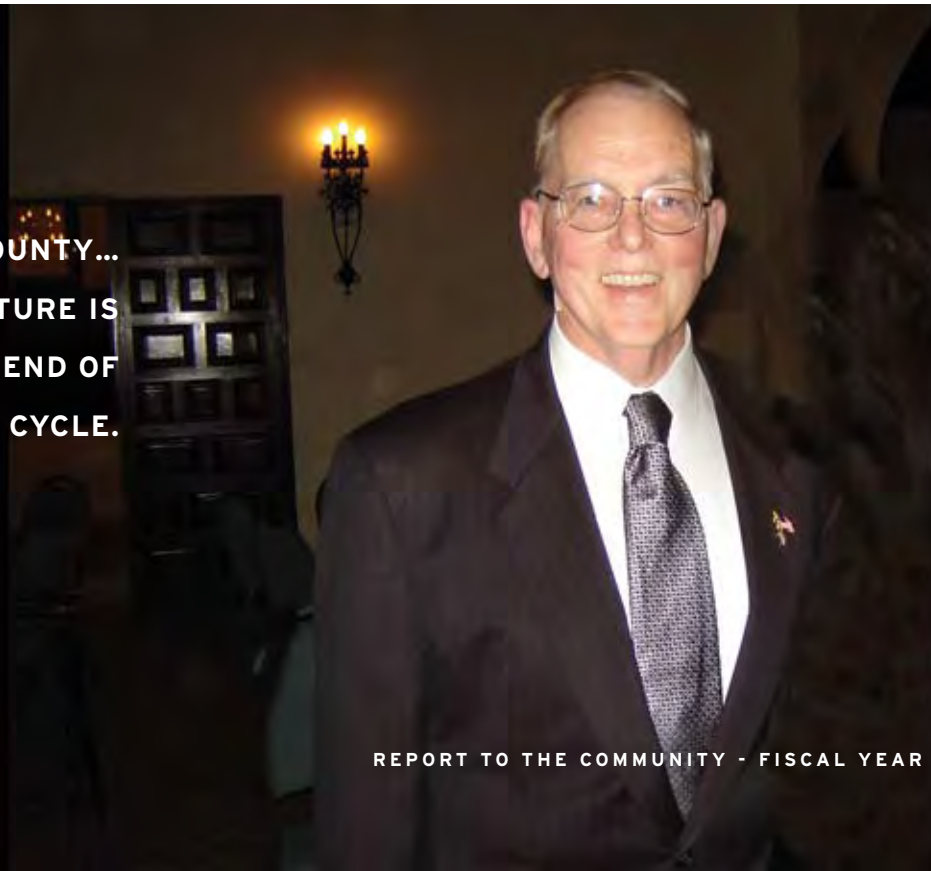
time had come to act so the next generation could have the systems that we've enjoyed. It was either that or leave a note behind saying, 'We had the chance to preserve this and we didn't take it,'" he says.

Donald was also proud to work on a number of environmental advocacy and education projects, including the adopt-a-creek program and the Tule Pond Wetland Center in Fremont. He helped foster a sense of ownership among stakeholder groups such as local friends of the creeks organizations, chambers of commerce, and a variety of community groups.

"A bureaucracy can be so busy that it tends towards being impersonal. But a lot of the Flood Control District's programs have given local families a place to connect with each other as well as with the environment."

In 2006, Donald retired and returned to his home state of Kansas. The staff at Alameda County Public Works Agency expresses gratitude for the work he did to preserve both the county's infrastructure and its environment.

“IN ALAMEDA COUNTY...
INFRASTRUCTURE IS
REACHING THE END OF
ITS LIFE CYCLE.



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EN CASO DE EMERGENCIA marque 9-1-1

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of major creeks in Alameda County

PARA REPORTAR DESBORDAMIENTO (510) 670-5500
o inunacion de arroyos en
el Condado de Alameda

TO REPORT ILLEGAL DUMPING (510) 670-5500
of trash in all creeks

PARA REPORTAR ARROYO (510) 670-5500
ilegal de basura en los arroyos

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To Serve and Preserve Our Community

Fiscal Year 2006 Report

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