



FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

Date: May 10, 2010

Malcolm Dougherty, District Director
Department of Transportation
P.O. Box 12616
Fresno, CA 93778-2616

Attention: Jim Perrault, District Local Assistance Engineer

Final Project Expenditure Report (For EEM Program Projects)

Description/Location of Work: Landscaping of Basin "S" to include planting trees and turf and installing an irrigation system.

Project Completion Date: 10/31/2009

Expenditure Authorization: 06-928043

Project Number: EEM-2006(052)

State-Local Entity Agreement Number: 06-16-052

State Funds Allocated: \$152,446.00

<u>Expenditure Incurred:</u>		<u>Total \$</u>
A.	Payment to Contractor	\$155,336.95
B.	Other Project Costs:	
	a. Preliminary Engineering	
	b. Construction Engineering	\$15,198.27
C.	Liquidated Damages	
D.	Outstanding Contractors Claims	
E.	Others – Less Over Budget	- \$472.92

Sources and Amounts of Additional Funds Used:

Additional funds provided by Fresno Metropolitan Flood Control District General Fund.

State Funds Allocated But Not Used: \$0.00

CERTIFICATION

I hereby certify that:

To the best of my knowledge and belief, the information in this report is a true and accurate record of project costs. The work was performed in accordance with the CTC approved scope and state funding for the project.

Bob Van Wyk, General Manager-Secretary
Fresno Metropolitan Flood Control District

PROJECT VERIFICATION: This verification of completion also constitutes approval to pay costs shown in the Final Invoice included in the Report of Expenditures. I have reviewed the job site and found the project completed in accordance with the scope and description of the project authorization document

District Local Assistance Engineer

Date: _____



FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

Date: May 10, 2010

Malcolm Dougherty, District Director
Department of Transportation
P.O. Box 12616
Fresno, CA 93778-2616

Attention: Jim Perrault, District Local Assistance Engineer

Final Project Expenditure Report

(For EEM Program Projects)

Description/Location of Work: Landscaping of Basin "RR1" & "RR3" to include planting trees and turf and installing an irrigation system.

Project Completion Date: 12/11/2009

Expenditure Authorization: 06-928033

Project Number: EEM-2006(036)

State-Local Entity Agreement Number: 06-16-036

State Funds Allocated: \$250,000.00

<u>Expenditure Incurred:</u>		<u>Total \$</u>
A.	Payment to Contractor	\$444,601.20
B.	Other Project Costs:	
	a. Preliminary Engineering	
	b. Construction Engineering	\$36,613.84
C.	Liquidated Damages	
D.	Outstanding Contractors Claims	
E.	Others – Less Over Budget	- \$3,119.08

Sources and Amounts of Additional Funds Used:

Additional funds provided by Fresno Metropolitan Flood Control District General Fund.

State Funds Allocated But Not Used: \$0.00

CERTIFICATION

I hereby certify that:

To the best of my knowledge and belief, the information in this report is a true and accurate record of project costs. The work was performed in accordance with the CTC approved scope and state funding for the project.

Bob Van Wyk, General Manager-Secretary
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District Local Assistance Engineer

Date: _____



Community Tree Planting in Southwest Fresno



Volunteers fan out to plant 74 trees at the stormwater basin at Teilman and Nielsen Avenues on a September Saturday morning.

Trees, trees and more trees. Seventy-four trees now ring the 14.5-acre stormwater basin at the Freeway 99/180 interchange in southwest Fresno. Thanks to community volunteers, Tree Fresno and District staff, all of those trees were in the ground within three hours on Saturday, September 13, 2008.

Approximately 40 people, nearly half of whom were District staff, family, or Board members, came out to



beautify the basin site. Tree Fresno provided volunteer coordination, instruction in proper tree planting, and tools such as shovels, stake pounders and hammers.

The stormwater basin is next to the Teilman Education Center, which was represented by Principal Nick Hustedde and his sons, Sean, 7 years; and Connor, 4 years (l).

The tree planting project was jointly funded by a State of California Environmental Enhancement and Mitigation Program and the District. Two more community plantings like this are planned for spring, one a little further west on Freeway 180 and the other at Ashlan and Peach Avenues.



This young woman and her son saw the planting going on as they drove by and stopped to help.

This tree planting project marks the 10th tree planting partnership between the District and Tree Fresno, and is part of the District's continuing efforts to beautify the stormwater basins throughout Clovis and Fresno.

Green and Beautiful

This is how the basin looks (below), six weeks after the community tree planting and the seeding of turf. The appearance of the completed basin is comparable to basins at Herndon and Maroa, and at Ashlan and Hughes Avenues.



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Message from the General Manager



Bob Van Wyk

This time of year the District gears up for the coming rain season and begins the transition from the dry season to winter operations. This transition takes about two weeks, about 600 man-hours to accomplish and ensures that urban and rural facilities are ready for whatever the weather brings.

Valves which control the inflow and outflow of water to basins are lubricated and exercised. Valves that connect Fresno Irrigation District's (FID) canal system to District basins are closed to prevent water from entering the basin system, thus preserving capacity needed to capture stormwater. Valves are opened that allow gravity-driven movement of water from one basin to the next one downstream so that water can be moved from basins reaching capacity to those downstream that still have storage available.

During large, extended storm events, Operations staff

will enter into round-the-clock emergency operations and two to three shifts work to monitor storm events, flood events, pumps, turn pumps on and off, service pumps, respond to drainage concerns from citizens, and monitor water levels at the urban drainage basins and rural flood control facilities (dams and reservoirs).

Winter operations also involve coordinating stormwater discharges and emergency operations procedures with other agencies. District staff routinely work with FID, the cities of Fresno and Clovis, the County of Fresno and sometimes Caltrans. Whatever it takes to get the job done – it's different every time.

Part of the District's mission is to keep water away from homes and businesses, and to prevent unsafe street conditions. Only during storms is it evident that the flood control system is at work, though staff work year-round to build and maintain storm drainage and flood control systems that protect the homes and businesses of Clovis and Fresno.

Director's Perspective

The next few issues of Flood Line will feature articles by each of the seven members of the District's Board of Directors. Directors are appointed for four-year terms; four are appointed by the City of Fresno, two by the County of Fresno, and one is appointed by the City of Clovis.

It is hard to believe that the District celebrated its 50-year anniversary in May of 2006. FMFCD was created on June 5, 1956 as a result of citizen effort, with the goal to control flooding and manage the flood, storm, and surface and groundwater resources of Fresno. The service area later included Clovis and some foothill areas, and has grown from its original size of 56 square-miles to a territory of approximately 400 square-miles.

The District has invested close to \$300,000,000 building the local stormwater drainage system. This value represents the actual cost at the time of construction, and does not reflect the current value of the system to the community.

I believe the primary responsibility of the District is to safeguard and enhance this enormous investment that has contributed greatly to the economic vitality of the Fresno-Clovis metropolitan area by helping to provide basic infrastructure, including the planned local drainage facilities.

The District also strives to improve the quality of life in our area by working with other entities to provide more green space and recreational areas, such as baseball fields and playgrounds by utilizing some District facilities.

The District is also a leader in effective water conservation programs. It is extremely crucial to retain stormwater runoff for groundwater recharge. We need to work diligently to expand the system to increase its water conservation capabilities.

But it is obvious that none of the District's achievements could have been reached without a well-motivated, positive workforce to carry out the policies established by the Board.

Now that 50 years of dedicated service to the community are behind us, the District looks forward to continuing its mission to provide the highest level of service to the community and I am very proud of being part of this service.



*Director
Mike Rastegar
represents the
City of Fresno*

Engineering Firms Receive Industry Honor

Two local consulting engineer firms have received the American Society of Civil Engineers “Outstanding Civil Engineering Project for 2008” award for their work on the District's Fancher Creek Detention Basin Project. The Project, a 273-acre stormwater detention facility, is the first line of defense against damage to homes, businesses and farms from floodwaters that can overflow local waterways which run through heavily populated areas of Fresno.

BSK Associates handled geotechnical engineering and Blair, Church and Flynn Engineers handled civil design engineering. The basin was designed at a 30-day, 200-year storm protection level, which means the basin can handle storm runoff from major storms which have a 0.5% probability of occurring in any given year.

Criteria used to determine a project's worthiness for the award included its impact on society, special design issues, engineering complexity of the project, and whether



Resolutions of Appreciation - District Board Chairman Richard Welton presents resolutions of appreciation to Hugo Kevorkian of BSK Associates (l) and to David Mowry of Blair, Church & Flynn Engineers.

the project was completed on time and within budget. The ASCE determined the project met all criteria.

The District Board of Directors recognized this honor by giving an honor of its own, presentation of signed and framed resolutions of appreciation presented to BSK Associates and Blair, Church & Flynn Engineering (shown above).

Street Improvements Address Citizen Concerns



Getting the job done - Paul H. Garcia (standing, L) and City of Fresno Street Maintenance staff on Florence Ave.

In May of 2005, Mr. Paul H. Garcia, President of the Concerned Citizens of Calwa (CCC) neighborhood advocacy group, came before the Flood Control District's Board of Directors. He described the lack of curb and gutter and the poor condition of Florence Avenue in front of the stormwater basin across the street from Calwa Park.

Mr. Garcia told the Board the street had become a magnet for the illegal dumping of trash. He and the CCC believed street improvements would make the area look more finished and clean, and would discourage people from dumping their trash and old furniture.

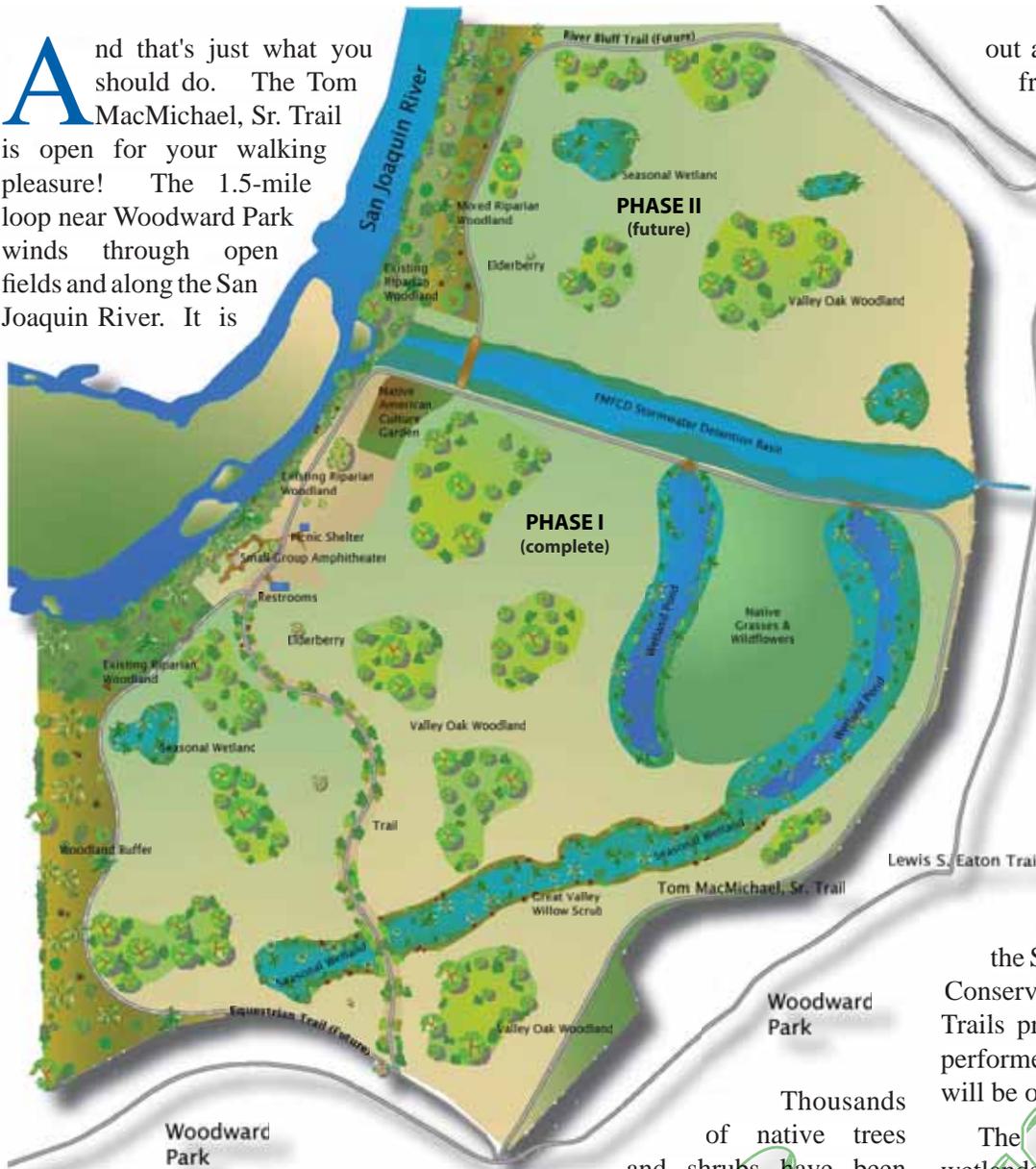
After hearing Mr. Garcia speak about the concerns of Calwa's citizens, the Board requested staff to coordinate with the City of Fresno. District staff contacted the City and was told of plans to reconstruct the street. The basin, on Florence between Cedar and Jackson Avenues, was within the City's reconstruction project area. Storm drain pipeline installation was already planned for the area, and was then timed to take place before the start of the City's reconstruction project.

The City has finished the curb, gutter and sidewalk, and street reconstruction is next. The District had already completed the pipeline to move stormwater from the street to the basin.

Since the CCC's request, the District has made a regular effort to keep the basin frontage on Florence Avenue clean. A District maintenance contractor cleans up the site once a month, and because of the substantial amount of trash illegally dumped in front of the basin, also performs a more thorough clean-up every other month. In addition, trash cans were placed in front of the basin to help encourage proper disposal of trash and alleviate the problem.

MacMichael Trail Was Made For Walking

And that's just what you should do. The Tom MacMichael, Sr. Trail is open for your walking pleasure! The 1.5-mile loop near Woodward Park winds through open fields and along the San Joaquin River. It is



out and enjoy the trail and benefit from a walk in the outdoors; visit often to see the plants grow and change through the seasons; and observe the many diverse birds—the migratory birds in the fall and spring, the overwintering birds, and the breeding birds in the spring and summer.”

Working Together

The MacMichael Trail is the result of teamwork between eight state and local agencies, including the San Joaquin River Conservancy, the California Department of Water Resources (DWR), and the District. Phase I is complete and encompasses the 100 acres south of the channel. The MacMichael Trail and the restroom are complete, and were funded by the Conservancy, a donor to the San Joaquin River Parkway and Conservation Trust, and a Recreational Trails program grant. The work was performed by the City of Fresno, and will be operated by City Parks.

part of the Jensen River Ranch Habitat Enhancement Project, a key element of the San Joaquin River Parkway.

A District stormwater channel bisects Jensen River Ranch and conveys runoff water from the surrounding neighborhood. Wetlands have been created using the runoff water by diverting it from the channel through the wetlands (oxbows) for natural filtering, and then back into the channel for release into the San Joaquin River. Interpretive signs explain how river water quality is protected by District programs.

Thousands of native trees and shrubs have been planted. Varieties include bush lupine, blue elderberries, California poppy, and purple owl's clover. The future groves of Valley Oaks and sycamores will be habitat for wildlife, including Cooper's Hawks, Scrub Jays and Nuttall's Woodpeckers.

Get Out On the Trail!

To get to the MacMichael Trail, you can walk there from the Lewis S. Eaton Trail, or you can enter from Woodward Park [see map].

Melinda Marks, Executive Officer of the San Joaquin River Conservancy, says, “I really encourage people to get

The storm drain tie-in, created wetlands, irrigation system and fencing were installed by DWR using funding from the Conservancy.

Planting was funded by a River Parkways grant from the California Resources Agency and performed by the Parkway Trust. The grant is funding ongoing plant monitoring and replacement of plants that don't survive. An outdoor classroom and picnic shelter will soon be constructed.

The design for Phase II, involving 67 acres north of the channel, is in progress. The work is being funded by the Conservancy and performed by DWR.

Classroom Resources Available

Environmental education resources are available to teachers of all grades, at no cost, through the District's Clean Stormwater program. Some materials meet California Department of Education standards while making a connection to local landmarks and water resources. They include:

Urban Water Cycle Poster

This 36"x48" poster was developed with the expertise of Fresno and Clovis teachers and meets 5th grade Earth Sciences standards. It uses local landmarks to illustrate the elements of the water cycle and provides several water cycle-related definitions.

Clean Stormwater Activity Book

This eight-page activity book can be used as a companion piece for the water cycle poster, or as an extra tool to use with an existing water cycle unit. It uses word search, code breaking, and multiple choice questions to teach pollution prevention. It is geared for 4th through 6th grades. Classroom sets will be delivered upon request.

Storm Drains 101

This five-minute video is made for students in the 7th-12th grades. It delivers rapid-fire stormwater pollution prevention facts, and teaches the basics of the urban drainage system. This engaging video explains why keeping stormwater runoff clean is important to us all. Learning about storm water – where it flows, how it becomes polluted, and how to prevent pollution – is fundamental to understanding and protecting our local water resources. Available in VHS or DVD format.

School Presentations

District staff are available to come to your school and put on a fun, interactive assembly or classroom presentation that teaches students about local water resources and ways they and their families can prevent pollution.

Watershed Maps and Photos

To complement classroom learning, District staff can provide teachers with aerial photographs and maps showing how stormwater is managed in their backyard – where it drains, and how it flows. Visual aids help students to connect what they've learned to real life conditions in our community.

The District's Clean Stormwater program was created in 1996, and its purpose is to effect public involvement and education to help increase awareness and change behaviors that contribute to water pollution. For details on these educational resources call Brandy Swisher at (559) 456-3292, or visit: www.fresnofloodcontrol.org

Erase the Waste Curriculum

This program, developed by the California Water Boards, provides a student-centered science investigation, focused on California's growing problem of polluted runoff. A complete web site, www.waterlessons.org, offers the following:

- Units of study aligned to California Content Standards and which support the Education and the Environment Initiative.
- Lesson plans for 4th-6th grades.
- Online teacher support.
- Lesson plan builder to make your own personalized lesson plans.



News Line

District Employee Named Pollution Prevention Advocate of the Year

Patrick Bryan, a twelve-year employee in the District's Environmental Resources Department,



was recognized by the Western Sustainability and Pollution Prevention Network (WSPPN) at its annual conference for his outstanding and effective work in teaching and promoting pollution prevention.

Patrick came to work for the District in 1996, just two years after issuance of its first National Pollutant Discharge Elimination System (NPDES) permit, and at the advent of the Clean Stormwater Program with its water quality and public education requirements.

Because he was there at the beginning, Patrick knows the program from all angles. He conducts business inspections, construction site inspections, school presentations, construction industry presentations, represents the District at public events and engages in interagency coordination. He has incorporated a personal interest in magic into his presentations and teaching style, and is able to show anyone simple ways they can prevent stormwater pollution. His commitment and creativity make him an extremely effective educator of students, business people and the general public.



Clean Stormwater Grant Applications Available!

Mini-grants are available to non-profit organizations and schools for projects focusing on environmental education and stewardship. Completed applications are due March 6, 2009. Visit www.fresnofloodcontrol.org for application and examples of past grant projects.

Copper & Cedar 'Family Fitness' Park Planned



Copper River Development, Inc. has proposed recreational development of a 23-acre stormwater basin near its Copper River Ranch housing development at Copper and Cedar Avenues. The design theme for the park is “family fitness” and features include a tot lot, exercise par course, a walking trail, open green space, and potential future sites for public movie screening, and soccer and baseball fields. The proposed park design will use approximately half of the basin’s 23 acres for recreation, operation of which will be a working partnership between Copper River, the City of Fresno, and the District.

The basin will continue its primary function as a stormwater retention site, provide groundwater recharge to our area's underground aquifer, and will become a City park like many other District basins that have been developed as recreation sites. This means the District will continue to maintain the basin’s equipment and operations related to stormwater capture and groundwater recharge, and the City assumes responsibility for all recreational features. The difference with this site is that the developer will subcontract from the City through the area's existing Community Facility District for all recreational site maintenance.

This site is envisioned as an award-winning recreation amenity for the citizens of Fresno. Developer Darius Assemi

explains, “Our goal is to create Healthy Lifestyle Parks within all our neighborhoods, which can be enjoyed by people of all ages and abilities. This park layout will raise the bar in terms of joint use basin design in our community.”

“We have been designing this project with the idea of innovative design, mutually beneficial coordination, and a substantial benefit to the community from the project's conception”, says Amber Adams, Engineering Manager for Quad Knopf, the planning and engineering firm in charge of the park project.

Surface water will be used for all landscape irrigation, and will come from multiple sources, including the Enterprise Canal. This saves millions of gallons of potable water each year. Surface water for irrigation may also be provided by pumping from another basin just across the intersection. “Dual use of this basin for groundwater recharge and recreation is especially compatible with the use of surface water for irrigation. Any excess irrigation applied to the recreation area will percolate and supplement the groundwater recharge program”, states Jerry Lakeman, District Engineer.

Pending final plan approval by the District Board and the City of Fresno, construction is expected to begin in 2010, and the park opening is planned for in 2011.

Bureau of Reclamation's Emergency Action Plan

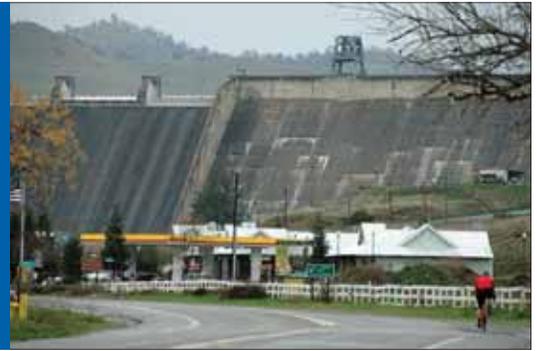
Practice makes perfect, particularly in an emergency. When all agencies responding to an emergency are practiced and prepared for what needs to be done, they work seamlessly together. Each year the Bureau of Reclamation updates its Emergency Action Plans (EAP) for the facilities it is responsible for, and every three years it conducts “table top” exercises of the EAP with local, state, and federal agencies, and downstream first responders who are responsible for protecting the public.

The Bureau is responsible for major water projects in the 17 contiguous western states, including more than 500 dams, 348 reservoirs, and 58 hydroelectric power plants.

Friant Dam is under the Bureau's jurisdiction and was the site of a “table top” exercise over the summer. The Bureau of Reclamation invited all local agencies which would be affected by large releases from Friant Dam, to the exercise. To prepare for the exercise, they put together a design team to set up a mock emergency event.

Brent Sunamoto, Engineer with the District, attended this summer's series of meetings and explained, “The District was selected to be on the design team, so I participated in weekly design meetings at Friant Dam over about a two month period. The event was designed to be large enough to

Friant Dam is a concrete gravity dam completed in 1942, with a water storage capacity of 520,500 acre-feet.



require a lot of decisions to be made - where to divert water, where to evacuate, who to coordinate with, etc.”

“Following the “table top” exercises, the results of each agency's performance was discussed at a ‘hot-wash’ session. This evaluation and discussion was valuable in spotlighting breaks in communication or other areas that need improvement, and allows for discovery and correction of problems or inefficiencies before they become critical” added Peter Sanchez, District Operations Engineer.

For more information on the Bureau of Reclamation's emergency readiness programs, visit www.usbr.gov/emergency/.

Optimist Club's Youth in Government Day

The Optimist International organization in Fresno hosted its annual Youth in Government Day on November 13, 2008, sponsored by the Public Law Practice Group of the law firm of Baker, Manock & Jensen. This teen “job shadowing” program began in 1959 and is part of the larger Youth Appreciation program. It paired high school students from throughout Clovis and Fresno with adults who work in all facets of government. The morning was spent showing students first-hand what it takes to make local government run.

Each year the Optimist Club contacts all 19 high schools in Fresno and Clovis, and the schools' U.S. Government teachers select students to participate. The District was one of more than twenty state and local agencies and departments that participated. Others included State Assembly, Senate and Congressional representatives, Superior Court Judges, Fresno City Council members, Fresno County Supervisors, and Fresno Firefighters and Police officers.

District staff took three students on a tour of a handful of flood control and urban drainage facilities. The students

were shown how the Clovis and Fresno metropolitan areas are protected from flood waters originating in the foothills and from stormwater falling onto the cities.

The tour began at the District offices with an explanation of how the rural and urban systems work together and a look at the District's Operations Center, where stormwater basins are monitored and controlled by telemetry. Next, the students were shown the Big Dry Creek dam and reservoir, as well as storm drainage basins in Clovis and Fresno, both of which also serve as groundwater recharge and recreation sites. The flooding history of the Fresno area was explained and shown with photos of urban flooding in the 1950's, 1960's and the 1970's.

The day was concluded with a luncheon for all of the participating students and their governmental guides. Students got a chance to speak to the entire group and give their impressions of the day and talk about what they learned, and their “shadowees” got to comment, too. If your agency would like to be part of next year's Youth in Government Day, call John Smith at 432-5400 for details.

Close Up: Rick Lyons



Artistic and good at math - a rare and exotic creature, and Flood Control has one. His name is Rick Lyons and he came here in 2003 from Santa Cruz with his wife Janell, and he came with an interesting and varied background. Rick was educated in graphic design and drafting at San Jose State. His first job out of school was with a company called Aqua Media.

There, he drafted, designed and checked water purification systems. His last job before coming to the District was with a company called System Studies, where he worked for 20 years. That position involved the design and review of air pressurization systems for telephone cable facilities.

Rick and Janell looked at Fresno to relocate because it was centrally located between their parents. "Initially, we were impressed with the feel of Fresno, with the people and the sense of community. There's not a lot of 'me first' here. Families, schools and community seem to be the focus."

With his solid work history, he was looking for a place where he could stay and grow. During an interview with Alan Hofmann, District Assistant Engineer/Design Engineer, Rick found out that the District was looking for people who were interested in staying. Long-term employees were sought after and valued.

When Rick started as an Engineering Technician in the Engineering Development Review section in 2003, it was at the height of our area's building boom. He had to hit the ground running and experienced a steep learning curve. He says it was a challenging, but positive experience.

Mark Will, Engineer III, RCE and Rick's supervisor, describes what he brought to the department, "Rick came with a great willingness to learn the correct methods and procedures used by the Development Review department. He has produced an impressive volume of completed work that is still growing today. He is a valuable employee to the District, both in his interactions with co-workers and in his inter-agency representation of the District."

About the working environment at the District, Rick says, "When I started here, I was taken right in. That first day, I already felt like I'd been here for years. It was an adjustment to saying 'good morning' to everyone. It shouldn't have been, but it wasn't something I was used to from my last job. Very cool. And, the open door policy here is important to me. I know I can talk with any of the managers, all the way up to the District Engineer and the General Manager."

Rick says he is always amazed at how friendly and welcoming people are at FMFCD. This is important to him because he says we spend as much time with each other as we do with our families. Because of Rick's view on having a welcoming workplace, he does his best to provide that to his co-workers. Always patient, always professional, Rick is an asset to the District and to those who work around him.

OSO DE ORO PARK PAVILIONS - Planning a birthday party or other outdoor special occasion? Reserve, at no charge, a spot at the beautiful Sloan Johnson Oso de Oro Lake Park, located on Forkner south of Bullard Avenue. Reservations can be made up to six months in advance. Call 456-3292 for details.



Fresno Metropolitan Flood Control District
5469 E. Olive Ave., Fresno CA 93727 • www.fresnofloodcontrol.org

Board of Directors

Richard Welton, Chairman • Kendall Groom, Vice-Chairman • Frank Franco • George Marcus • Roy Spina • Jennette Williams • Mike Rastegar

Need a Speaker?

If your community group is in the Fresno/Clovis area, contact Brandy Swisher, at brandys@fresnofloodcontrol.org or 456-3292, to arrange a presentation on flood control and urban drainage, water resource management or pollution prevention.



Board adopts \$29.2 million 2009/2010 budget

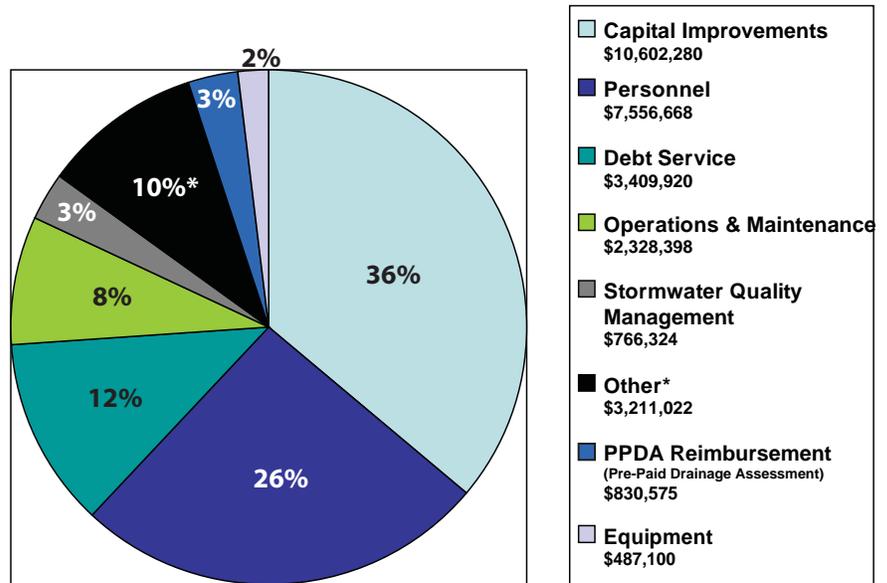
At its public meeting on June 24th the Fresno Metropolitan Flood Control District Board of Directors adopted the \$29.2 million operating budget for fiscal year 2009/2010. In doing its part to stimulate the local economy, the District has crafted a budget that like last year's, has a heavy focus on capital improvements. And, the current competitive construction market is allowing more facilities construction to be completed for the money. Pipelines are being installed, basins and reservoirs excavated, pump stations installed, and the telemetry system upgraded and expanded, all to provide the level of flood protection planned for each neighborhood in Fresno and Clovis.

Where the money comes from

There are two primary sources of revenue for the Flood Control District; property taxes and developer fees. Property tax funds are used to pay for maintenance and operation of the rural flood control system and the urban storm drainage system, including landscaped/recreation basins. It also funds personnel and office costs, equipment purchases, and the Clean Stormwater Program. The District also pursues grant funds when possible.

Development fees are charged on new residential, commercial and industrial construction so that each new development pays for its share of the local drainage system. This includes construction of storm drain pipeline to serve the new construction, basin excavation to capture storm runoff generated by the development, and installing pump stations, storm drain inlets, and basin fencing.

2009-2010 Total Budgeted Expenditures



**Other - includes expenses such as office administration, land appraisal and acquisitions, engineering, and environmental planning.*

The pie chart above identifies all District expenditures by category.

Urban and rural flood protection

There are 162 urban drainage areas within Fresno and Clovis. They range in size from roughly one to two square miles, and are served by pipelines leading to a ponding basin generally located near the lowest point in the drainage area.

The Fresno/Clovis area is also protected by rural flood control structures. A planned system of dams, reservoirs,

'Budget' continued on page 3

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Message from the General Manager



Bob Van Wyk

The past four months have presented both challenges and successes for the District. In June, the Board of Directors considered a 29 million dollar expenditure plan for the 2009/2010 fiscal year that continues an aggressive capital improvement infrastructure program that will provide needed storm drain service to parts of our community. The

Board of Directors and staff worked together with the Cities of Fresno and Clovis, the County of Fresno, Caltrans, and the Fresno Irrigation District to ensure the budget maximizes coordination of infrastructure projects and program implementation efforts maximizing service delivery to our community.

However, we remain concerned that implementation of the State budget will result in a reduction in property tax revenue to the District. While the exact dollar amount is not known, we expect the number to be about \$800,000. Between now and December staff will make a recommendation to the Board of Directors on how to address the funding reduction.

At the same time we are addressing revenue reductions, the District has applied for funding as part of the Federal economic stimulus package. The State Water Resources Control Board, through its administration of the State Revolving Fund program, is allocating \$273 million dollars in funding provided through the American Recovery and Reinvestment Act of 2009 to help communities address wastewater and stormwater issues that effect water quality. A District grant application totaling \$3.9 million dollars is moving through the State approval process with continued success. The project includes the construction of ten pipelines serving approximately 3,500 acres of land in the urban core of Fresno that will be used to move standing water from neighborhoods, industrial areas, and roadways to regional stormwater treatment basins.

The grant process has been very competitive but all indications are that our community will receive the funding necessary for project completion. We look forward to completing the grant application process in September and initiating these projects this fall.



District to apply for DWR groundwater grant

As previously discussed in Flood Line, the District partners with the cities of Clovis and Fresno and the Fresno Irrigation District to recharge tens of thousands of acre feet of surface water back into the groundwater aquifer every year. There are nearly 90 ponding basins used for this purpose, some of which recharge faster than others. The speed at which water percolates through the soil to the groundwater aquifer is determined by the permeability of the types of soil present in the basin floor. Clay is the least permeable, and looser soils like sand are the most permeable and allow water to recharge at a faster rate.

The District is pursuing a California Department of Water Resources Local Groundwater Assistance Program grant to help improve its recharge capability. The District's grant project seeks to improve recharge rates in Fresno and Clovis by sampling soil types beneath 27 basin sites to create soil profiles to help determine potential groundwater infiltration rates. Samples will be taken at depths of 15 and at 50 feet. Sites with less permeable soils can be improved by

Groundwater recharge occurs year-round in District ponds like the one shown here. A \$250,000 grant for soil sampling and profiling from the Department of Water Resources would help the District improve the recharge rates at underperforming basins.



over-excavating the basins and backfilling them with more permeable soil types.

It isn't yet certain if funding will be available this year, but staff will be ready if it is and will submit an application requesting \$250,000 for soil boring and sampling. Stay tuned for details and updates.



Capital projects continue full steam ahead

Over the next fiscal year the Fresno Metropolitan Flood Control District plans to complete 45 capital improvement projects throughout Fresno and Clovis, in both urban and rural areas. This represents \$10,602,280 worth of work budgeted for fiscal year 2009/2010. Projects range in cost from the \$10,200 removal of a concrete structure to the \$1.9 million budgeted to complete excavation, culvert and pipeline installation and other work planned for the Fancher Creek Reservoir at McKinley and McCall Avenues. This ambitious work schedule continues the momentum of last year's capital program improvement projects.

The most common types of work planned for this coming year are the installation of internal basin pipeline and the installation of pump stations. There is also a fair amount of coordination with the City of Fresno on their planned street improvements. The District proceeds ahead of the City's work and completes planned pipeline and storm drain inlets in order to avoid re-trenching and re-paving the street later. There is also one such project with Caltrans, and other coordinated projects with the Fresno Irrigation District involving joint improvements to certain canals.

As mentioned in this newsletter's cover story about the newly adopted budget, a reality of the current economic climate is that prices for construction and supplies are lower than normal, allowing the District to get more work done for the money budgeted. To make more efficient use of available money, more capital improvements projects are being scheduled for this fiscal year.

Budget

Continued from cover

channels and streams controls storm runoff from a 175 square mile area, to the east of the urban area, which reaches an elevation of 5,000 feet in the Sierra-Nevada.

Taking care of business

The Flood Control District has 80 authorized positions which range from engineers to environmental analysts to field technicians to office staff. This small core of employees is responsible for all District services, including the design, construction, operation and maintenance of every urban drainage and flood control structure in the District's 399-square mile service area. Because Flood Control has a relatively small staff, part of keeping the system maintained

Another potential boost for the capital program is American Recovery and Reinvestment Act (ARRA) funds approved by the U.S. House and Senate earlier this year. The District is pursuing \$3.9 million in grant funds for 10 pipeline construction projects and five basin surface water irrigation projects.

"The District has moved rapidly to answer the State and Federal calls to stimulate the economy..."

District Engineer Jerry Lakeman explains, "The District has moved rapidly to answer the State and Federal calls to stimulate the economy with public improvement projects. Last fiscal year the District expended \$12,551,774 in improvements, an 84% increase over the previous year's capital expenditures. The District's Board of Directors recognized the need to help the local economy and is doing what it can to ameliorate the slowing of work in the construction industry. Not only is the effort helping the industry through a tough economic

period, it is an opportunity to gain public infrastructure improvement at very competitive costs. Work has been completed at 30% or more below earlier costs.

"The District is continuing this effort in the new fiscal year and also pursuing stimulus funding from State and local governments. District staff and consultants have responded quickly with shovel ready projects for the State and Federal agencies to approve funding, and these projects are now awaiting allocation of stimulus funding."

As the year goes on look for updates on the capital improvement program and the District's success in applying for ARRA funding.

and growing is working with local companies. This fiscal year nearly \$14,000,000 will be put into the private sector through competitive bidding and the purchase of goods and services, \$10,602,280 of which is devoted to capital improvement projects.

Activities such as construction and basin maintenance, engineering, environmental monitoring, auditing and legal consulting are contracted to local companies. Day-to-day needs such as building cleaning and maintenance, and the purchase of office supplies also support the private sector. Bob Van Wyk, the District's General Manager, explains, "The form of business plan practiced by the District allows the program to respond to economic conditions by simply outsourcing more work during expansion periods when the economy is healthy. Conversely, when the economy slows down, outsourcing is also reduced."

Air District grant helps buy hybrid



This 2009 Honda Civic Hybrid is the District's first alternative fuel vehicle.

Flood Control has purchased its first hybrid fleet vehicle with the assistance of a \$2,000 incentive grant from the San Joaquin Valley Air Pollution Control District's (SJVAPCD) "REMOVE II Program". The REMOVE program (Reduced Motor Vehicle Emissions) promotes projects that reduce motor vehicle emission. The District purchased a Partial Zero Emission Vehicle (PZEV) with an advanced hybrid engine equipped with cutting-edge emissions controls. PZEVs run on gasoline, yet produce extremely clean emissions.

After considerable research comparing fuel consumption, safety, long term maintenance cost and sticker price, Flood Control District staff recommended the purchase of a Honda Civic hybrid sedan. The Board of Directors approved the purchase on May 27, 2009. Due to the hybrid's high fuel efficiency and along with the SJVAPCD grant, the overall cost of the vehicle was equal to comparative non-hybrid vehicles and will not only lower Flood Control transportation costs but will help the San Joaquin Valley attain air quality standards.

For more information on the Air District's grant and incentive programs for residents, agriculture, commercial businesses, and agencies, visit www.valleyair.org.

Trolley Creek Park gets a makeover from student volunteers



Bright and early on March 19th about a dozen high school students began work to beautify the Flood Control District's Trolley Creek Park in southeast Fresno. The students came from schools around town through a volunteer youth program run by the Fresno County Economic Opportunity Commission (EOC), and funded by the Fresno County Workforce Investment Board.

Students removed graffiti, painted the restroom interiors and picnic pavilions, replaced sand under the swing sets, and planted flowers throughout the park. Their efforts were featured in the Fresno Bee on March 20th.

Leadership activities like this are chosen by EOC program staff for the purpose of enhancing leadership skills in partnership with local agencies.

"The Flood Control District is pleased to provide a 'real-world' project for these civic-minded and

dedicated students. Their desire to help beautify the community they live in is worthy of respect and of our assistance in making it happen. District field staff take this opportunity to teach the students practical skills and show them the satisfaction of a job well done," said Bob Van Wyk, Flood Control's General Manager.

This is the third beautification project through which the District has partnered with EOC youth volunteers, and the second at Trolley Creek Park.

Trolley Creek Park is a three-acre park with a Fresno history theme, next to a nine-acre landscaped ponding basin north of Kings Canyon Road and east of Willow Avenue. It is one of 27 recreational sites developed by the Flood Control District throughout Fresno and Clovis.

Summer Youth Employment Program



Learning in the field - Robert Amparano (l) and District Field Tech David O'Masters work together at Oso de Oro Lake Park.

Learning in the office - Student Vanessa Delatorre-Gonzalez (r)



When the Fresno County EOC (Economic Opportunities Commission) called to see if the Flood Control District would be willing to hire a few students for the summer, the answer was 'Yes!'. Four students came to work alongside District staff for six weeks (or 240 hours). They learned general office practices, information technology, and recreation maintenance skills while earning \$8 per hour. The four students, including Vanessa Delatorre-Gonzalez, and Robert Amparano (shown above), range in age from 14 to 16.

These students and others around Fresno County were placed through the Summer Youth Employment Program. The purpose is to 'provide meaningful, paid work experience for...youth between the ages of 14 and 24.' The Fresno County Workforce Investment Board's goal is placement of 3,000 youth in businesses throughout Fresno County. EOC is assisting with 1,000 of those, and placements will be made through the end of September.

Vanessa Delatorre-Gonzalez, an 11th grader from Fresno, said the whole experience was a good one. "Working here taught me how the real work environment is, and it gave me a chance to do things I'd never done before. I also got a chance to work with the Engineering department, and I was

really thankful for that because I want to pursue a career in engineering. They showed me how they build basins and what they need to know to do that, and even let me label inlets and junctions on AutoCAD."

The program gives youth a chance to work in a variety of professional settings such as office, commercial, retail, industrial, agricultural, construction and educational. They get the chance to learn how they will be expected to dress, behave and perform on the job. The real-world experience gained can help get them ready to join the workforce with competitive skills. Plus, they'll have a great professional reference for future employment and/or college applications.

Employers who hire youth through this program provide productive, meaningful work; provide training and a well supervised, well structured work environment; communicate regularly with program supervisors to give feedback on mentoring, students' performance, hours worked, etc. This program is funded by the federal stimulus package and run locally by the Fresno County Workforce Investment Board and the Fresno County EOC.

To learn more, visit www.workforce-connection.com.

Clean Stormwater Grants in action

In March the District's Board of Directors awarded 13 Clean Stormwater mini-grants to help fund environmental education and improvement projects. The grants were awarded to a mix of schools, community and non-profit groups, and agencies. Grants are up to \$2,000 each, and a total of \$22,124 was awarded.

One project already completed is "Generation Green: Youth Serve Earth Day" which took place on April 25, 2009 along the San Joaquin River near the River Ranch House at the Eaton Trail and the McKenzie Preserve. More than 200 volunteers replanted native plant and tree species, removed non-native species, and hauled out trash and debris.

This was a collaboration between HandsOn Central California, the San Joaquin River Parkway & Conservation Trust, Tree Fresno, the Sierra Foothill Conservancy, CSUF as well as the EOC Local Conservation Corps and AmeriCorps programs. Nicole Smaira of HandsOn Central California explained, "The idea behind the project was to create an environmental project that engages youth and young adult volunteers allowing us the opportunity to demonstrate the effectiveness of volunteerism, the importance of sustaining a healthy environment and the need for continuing education about friendly environmental practices."

Newly offered this year are grants exclusively for fifth grade class trips to the Scout Island Outdoor Education Center. So far 14 have been awarded on a first come-first served basis, each for different schools throughout Fresno and Clovis, fully funding field trips for 1,270 students.

Volunteers plant trees at Ashlan & Peach



Many hands - even tiny ones - make light work. Preston Clarke (l) nails a tree tie in place.

Tree Fresno board members, staff and volunteers.

The trees and the turf (coming soon) will be irrigated using water from the basin, occasionally from the adjacent Gould Canal, and in a pinch using potable water from the City of Clovis system.

The costs of the irrigation system, the trees and the turf were funded in large part by an Environmental Enhancement and Mitigation Program State grant the District secured back in 2006. This is a 20-year old grant program that offers \$10,000,000 per year statewide to help fund projects that 'mitigate the environmental impacts caused by new or modified public transportation facilities.'

Tree varieties planted are Valley Oak, Southern Live Oak, Coastal Redwood, Chinese Pistache, White Ash and Chinese Elm. This will provide an interesting mix of trees for visual appeal.

This community beautification project enjoys lots of local support. Opening remarks for the assembled volunteers were made by Debbie Poochigian, District 5 representative of the Fresno County Board of Supervisors; Clovis Mayor Harry Armstrong and Tree Fresno President Jeff Roberts who joined District Director Roy Spina and General Manager Bob Van Wyk.

One hundred volunteers showed up bright and early June 13th at the District's 20-acre basin at Ashlan and Peach to plant 79 trees. And they did it in record time - one hour and fifteen minutes! Many were Pelco employees, some were basin neighbors, District and City of Clovis officials, employees and their families, as well as

Water Safety Council and City of Fresno offer free swimming lessons for kids

And they swam and they swam all over Fresno! A \$4,000 donation by the Water Safety Council of Fresno County has provided swimming lessons scholarships for 282 kids this summer season. The City of Fresno Parks, After School, Recreation and Community Services (PARCS) discounted their already low swimming lessons from \$30 to \$15, and the WSC donation picked up the other half. For the fifth summer in a row kids who may not otherwise be able to have professional swim instruction have gotten it.

Lessons were taught by Red Cross-certified instructors at City pools, and consisted of 10, 35-minute lessons given over the course of two weeks. Anyone three years or older can take swimming lessons. The sites where the scholarships were offered were chosen by City staff and this year were: the Mary Ella Brown, Mosqueda and Frank H. Ball community

centers and several 'learner pools' around Fresno. Each year scholarships are offered on a first come-first served basis, and to date have given approximately 1,000 kids the knowledge they need to help keep themselves safe around water. Taken into consideration were sites where lots of kids come for recreational swimming, but few take lessons. City staff also consider the income level of the surrounding neighborhood.

Drowning and near-drowning are the leading causes of childhood death and injury in the U.S. That is why teaching every child to swim is so important. Paired with close adult supervision, knowing how to swim is essential in keeping kids safe around all bodies of water. If you want to help fund the scholarship program for next year, call Brandy Swisher at the Flood Control District at 456-3292. You can teach a child to swim for \$15.

Water awareness promoted statewide



Cristel Tufenkjian of the Kings River Conservation District, and a member of CVWAC, talks to students at Liddell Elementary about water.

It's easy to forget how necessary water is to everyday life, though it is easier to remember when the temperature outside is 105 degrees. Every living thing needs water, and water is once again in the spotlight as a hot issue. Many water-related agencies, companies and groups seek to educate California's citizens about the importance of water to help enable the state to meet long-term water needs.

Common themes in water awareness education efforts, no matter who is spearheading them, are water conservation and water pollution prevention. In 2008 the U.S. Census Bureau's estimate of California's population was 36.7 million people. That is a lot of water users, most of whom have some control over the amount of water they use in a day. When people understand where their water supply comes from and that it needs to be kept clean, they have the power to change the course of their community's water future.

One statewide group seeking to educate is called the California Water Awareness Campaign. It was started during one of the worst droughts in California history (1987-1992) and has more than 200 members, including the Fresno Metropolitan Flood Control District. This area's local affiliate is the Central Valley Water Awareness Committee (CVWAC), which is comprised of more than a dozen local water-related companies and agencies.

Each May the Campaign and CVWAC focus on the observance of 'Water Awareness Month'. This year's efforts in the Fresno/Clovis area included the proclamation of May as 'Water Awareness Month' by the Clovis and Fresno City Councils and the Fresno County Board of Supervisors, as well as cosponsorship of the 'Water-Wise Plant Exchange' event held at the Fresno State Horticulture Greenhouses.

At the Plant Exchange gardeners donated water-wise

plants. Additional plants were provided by the Central Valley Water Awareness Committee (CVWAC) and Fresno State students. Visitors picked up plants, cuttings, bulbs and seeds during the event. Master Gardeners and other plant experts gave free advice on native and water-wise plants with the goal of creating beautiful yards and gardens that thrive on very little water.



Photos courtesy of Nora Laikam, City of Fresno Water Conservation and CVWAC member.

What can you do?

Lots. As explained in statewide and local public service announcements and other types of advertising, there are many ways to conserve water and to keep it clean, including:



Conservation

Turn off water when brushing your teeth; fix toilet leaks (usually caused by the flapper or the overflow); switch to low flow toilets to save water; water landscaping in the early morning or late evening to reduce water waste through evaporation, and maintain your sprinkler system (over half of home water use is for outdoor landscaping!); use a broom instead of a hose to clean driveways and sidewalks, and use an automatic shut-off nozzle on your hose (as shown above).

Pollution prevention

Recycle used motor oil; inspect your vehicle for leaks and repair them; follow label directions on pesticides and herbicides to avoid over-use; use a broom instead of a hose; and use less toxic/natural means to control insects and weeds.

More on the Web:

- To learn more about Central Valley Water Awareness Committee and its members visit www.centralvalleywater.org.
- To learn more about the statewide campaign visit www.wateraware.org.
- For a recap of the Water-Wise Plant Exchange and tons of photos, visit City of Fresno Water Division's web site: www.fresnowater.org.



Fresno Metropolitan Flood Control District

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www.fresnofloodcontrol.org

Board of Directors

- Kendall Groom, Chairman • Roy Spina, Vice-Chairman
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Oso de Oro Park Pavilions - Reservations

Planning a birthday party or other outdoor special occasion? Reserve, at no charge, a spot at the beautiful Sloan Johnson Oso de Oro Lake Park, located on Forkner south of Bullard Ave. Reservations can be made up to six months in advance. Call 456-3292 for details

Need a speaker?

If your agency, organization or community group is in the Fresno/Clovis area and you'd like a presentation on the flood control and urban storm drain system, water resource management or pollution prevention - contact Brandy Swisher at brandys@fresnofloodcontrol.org or (559) 456-3292.

Close Up: Alan Hofmann joins 30-year club



Above - Assistant District Engineer/Design Engineer Alan Hofmann (c) joined by his wife, Brenda, and youngest son, Brent at his 30th anniversary all-staff lunch. Right - Alan and District Board Chairman Ken Groom hold the Board's Resolution of Appreciation for Alan's 30 years of exemplary work.



and lasting impact he has had not only on the state of the District flood control programs, but on the people here. He was praised as a gentleman, a true professional, a great friend, a sharp dresser, and the kind of man the District has been fortunate to have on staff for 30 years.

Alan began his career here as an engineering intern in 1977, and was hired on as a full-time engineer upon his graduation in 1979 as one of the first fifteen employees. Since then he has helped to guide and impact the evolution of the District's operations and maintenance, groundwater recharge, development review, capital improvements, and master planning programs.

General Manager Bob Van Wyk explained, "Alan is one of the District's great success stories. He came to work as a student intern, took on many challenges, including being Operations Engineer, the Trolley Creek Park and Oso de Oro Lake Park projects, and headed up the Development Review department during a time in our community when it experienced its greatest expansion. Alan is an exemplary employee who has dedicated his career to the District's program. This is a better program because of him."

District Engineer Jerry Lakeman said, "On behalf of the many staff who have worked under his supervision and training and myself, I'd like to thank Alan for his 30 years of diligent contribution to the District."

Thirty years of continuously building skills, improving your workplace and your community. That's a fine view of anyone's career, and that's the view for Alan Hofmann as he and the District celebrate his 30th anniversary with the Flood Control District.

At Alan's all-staff lunch in June his coworkers took turns telling funny 'Alan stories' and explaining what a positive

