

SOLANO COUNTY WATER AGENCY



FLOOD CONTROL ADVISORY COMMITTEE **Meeting Announcement**

DATE: Thursday, April 24, 2008

TIME: 7:00 p.m.

PLACE: Solano Irrigation District Board of Directors Room
508 Elmira Road
Vacaville

AGENDA

1. Introductions and Public Comment
2. Approval of Minutes of March 27, 2008 Meeting
3. Committee Vacancy – still open
4. Delta Flood Control and Levee Issues in Eastern Solano County and Suisun Marsh – Mike Hardesty and Steve Chappell
5. Fiscal year 2008-2009 Flood Control Work Plan and Recommendation to Board of Directors on Flood Control Budget
6. Medium Sized Projects: Staff Update
7. Small Grant Projects: Staff update
8. Future Meeting Topics
9. 2008 Meetings 7:00 PM at SID

June 26

July 24

August 28

September 25

May 22

October 23

December 4

If you have any questions contact Alex Rabidoux at (707) 455-1106

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SOLANO COUNTY WATER AGENCY

FLOOD CONTROL ADVISORY COMMITTEE

MEETING MINUTES: March 27, 2007

Introductions and Public Comment: Chairman Rolf Ohlemutz called the meeting to order at 7:02pm. There was no public comment.

Approval of Minutes of January 24, 2008: The minutes were unanimously approved.

Committee Vacancy: Staff reported that there is one vacancy on the Flood Control Advisory Committee.

New FEMA effort to update Flood Insurance Maps – Solano County impacts: David Okita reported that the Solano County Water Agency does most of the flood control functions in the County, such as the flood control studies, maintaining the Ulatris Channel Systems, and the flood warning system. However, one flood control function that the County still retains is the FEMA Flood Plain Management program for the unincorporated area. Nick Burton from Solano County reported that after Hurricane Katrina FEMA realized that many levees in the United States did not provide 100-year flood protection. The eastern Solano County landowners were not interested in improving the levees, mainly because the levee improvements would be very costly and the area is all rural. For other parts of the County such as Sweeney Creek the FEMA flood zones did not change, even though the maps were highly inaccurate. The reason the areas did not change, is because FEMA only had funding to update areas with levees.

To correct this, the County would like to update some of the FEMA maps for Solano County. To update the FEMA maps, the County has to go through a process called a Letter of Map Amendment (LOMA). The County is interested in starting the LOMA process for the Sweeney Creek area first. If successful, the County may continue to include other watersheds. The reason why the County is interested in updating the FEMA maps is that it would give the County the ability to better plan for future growth in areas that are known to flood. Currently the County can only recommend new homeowners to raise their home in areas that are prone to flood but that are not in the FEMA flood zones. Residents from Heather Lane voiced concern about the extra fee increase for being included in a flood zone. Nick Burton stated that according to FEMA if you currently had flood insurance before being designated into a flood zone, you may be able to continue to receive the low rate. Committee member Steve Chappell wanted to make sure the SCWA watershed studies were being considered into the LOMA process. Both Nick Burton and David Okita explained that the SCWA watershed studies are the

baseline data that is being used by the County to go through the LOMA process. Committee member Mike O'Conner asked if the County had a legal obligation to submit the LOMA once the study was complete. Nick Burton responded that to the best of his knowledge this was not true, but that he would need to refer to the County's attorneys to verify that. Committee member Steve Chappell recommended going through a public process before sending the LOMA to FEMA. Nick Burton explained that the County will definitely be going through this process as they want to hear the public's comments on updating the FEMA maps.

“Why do we have so many 100-year storm events?”: Chairman Rolf Ohlemutz gave a presentation to the Committee on why do we have so many 100-year storm events? Rolf pointed out that many people believe it is raining more than it used to. Others believe that global warming is causing increased precipitation. Rolf debunked these conclusions by explaining that historical precipitation data does indicate that we are receiving more rain, and precipitation models for global warming are not yet conclusive. Another hypothesis that Rolf discussed was urban heat islands. In highly urbanized areas, temperatures have increased, resulting in more water being store in the higher temperature air, leading to increased convection and thundershowers. Rolf also discussed the forest affect, where forest areas tend to receive more rain because the ground is cooler, causing lower air temperatures, which results in the air being able to hold less moisture, and subsequently raining more. Rolf explained that these processes are not very applicable to Solano County because the bulk of our precipitation is not driven by local convectonal processes. The last hypothesis that Rolf discussed was increased nuclei, or very fine particles in the air that can lead to more precipitation. Rolf again explained that this is not very applicable to Solano County and California in general because of how our storms and active winds work.

Rolf explained that precipitation is quite variable regionally and at a very small scale. One example that Rolf presented was in New York, highly accurate long term records have been kept at both the JFK and LaGuardia airports. The two airports are only 12-miles apart, there is 30 years of highly accurate data, and New York has much smaller regional differences in precipitation than California. Precipitation data from the two airports was used to generate the 100-year storm event and the resulting difference between the two sites was 15%. Rolf illustrated that this is a fairly large difference for two almost identical sites with good data.

For regional analysis of storm events and precipitation data, Rolf explained that there is a substantial amount of averaging and smoothing of the data. In many cases, large unique outliers are taken out because they don't seem to be real, when in reality they might very well be good data. The Doppler Radar shows just how varied precipitation data is. Many of the intense storm cells that can lead to very high amount of localized rain can be very small. Most rain gage networks are not small enough to accurately measure all of the storm cells, because it is too costly and impractical. The end result is an averaging of precipitation data.

In conclusion, Rolf illustrated that we are probably not receiving more precipitation. Instead, precipitation is highly variable and can be very localized. Additionally, the tools and techniques that we use to measure precipitation and estimate storm events do have substantial limitations. Nevertheless, they are the best tools we currently have available.

Delta Flood Control and Levee Issues in Eastern Solano County: David Okita reported that Mike Hardesty from RD 2060 was unable to attend the Flood Control Advisory Committee meeting. The Committee decided to postpone the topic until the April meeting, when Mike Hardesty can attend. Suisun Marsh flooding issues will also be discussed as well.

Medium Sized Projects: David Okita presented a summary of the medium sized projects. For the Sweeney Creek watershed a total of 4 home raising applications have been processed and paid out. In the Gibson Canyon Creek watershed additional work is underway to better characterize overflow from Sweeney Creek. For the Alamo/Ulatis Creek watersheds, the SCWA Board approved a total of \$3.5 million to assist the City of Vacaville in constructing detention pond storage throughout the watershed. The Agency is also starting to look at improving the Ulatis Creek drop structure near Nut Tree Road. In LedgeWood and Suisun Valley Creeks the watershed study is progressing. The study is looking at building detention pond storage that would help reduce flooding on both creeks. One potential site was identified, but the landowner was not willing to participate. Other locations are being identified. In Dixon, the Dixon Regional Watershed Authority is working on a new proposal to submit to the Agency for flood control assistance.

Small Grant Project Updates: Alex Rabidoux presented a brief summary of the small grant projects. There was one new applicant in the Sweeney Creek watershed. The agency conducted a site visit and a proposal was submitted to determine if the project was applicable.

Next Meeting: The next meeting of the Flood Control Advisory Committee will be Thursday, April 24, 2008 at 7:00 pm at the Solano Irrigation District Board Room.

Committee Members Attending:

Paul Lum	Ron Campbell
Rolf Ohlemutz	Terry Riddle
Jim Daniels	Steve Chappell
Mike O'Conner	Charles Karnopp
Mark Holdener	Delbert Berg

Committee Members Absent:

Laura Peters Gus Silva

SCWA Staff:

David Okita Alex Rabidoux

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FY 2008-2009 Flood Control Budget

OPERATING BUDGET	AMOUNT \$	NOTES
Public Education/Flood Awareness	\$20,000	
Small Grant Program	\$50,000	
Dixon Watershed Project Implementation	\$0	Contributions for New South Channel Project (Contractual commitment)
Stream & Rain Gage Equipment	\$18,800	For new Flood Forecasting program & existing stations
Sweeney Creek Home Raising	\$100,000	
Vacaville Detention Basins	\$500,000	Contractual commitment
Watershed Plans	\$250,000	See allocation below
SCWA staff	TBD	SCWA staff costs to programs
SUBTOTAL - OPERATIONS	\$938,800	
CAPITAL BUDGET		
	\$0	
	\$0	
SUBTOTAL - CAPITAL	\$0	
GRAND TOTAL	\$938,800	

Estimated Unspent from FY 2007 - 2008 to FY 2008 - 2009 is \$ (\$-\$)

Watershed studies allocation:

Gibson Canyon	\$100,000
Suisun Creek	\$50,000
Ledgewood	\$50,000
New Studies	\$50,000
Total	\$250,000

FY 2007-2008 Flood Control Budget

OPERATING BUDGET	AMOUNT \$	NOTES
Public Education/Flood Awareness	\$20,000	
Small Grant Program	\$75,000	
Dixon Watershed Project Implementation	\$0	Contributions for New South Channel Project (Contractual commitment)
Stream & Rain Gage Equipment	\$66,700	For new Flood Forecasting program & existing stations
Sweeney Creek	\$0	From Reserves if needed
Watershed Plans	\$330,000	See allocation below
SCWA staff	\$128,000	SCWA staff costs to programs
SUBTOTAL - OPERATIONS	\$619,700	
CAPITAL BUDGET		
Ulatis/Alamo	\$0	From Reserves if needed
Stream and Rain Gages	\$22,500	
Sweeney Wing Wall Modification	\$75,000	Funded by Ulatis Project
SUBTOTAL - CAPITAL	\$97,500	
GRAND TOTAL	\$717,200	

Estimated Unspent from FY 2006 - 2007 to FY 2007 - 2008 is \$306,525 (\$1,034,525-\$728,000)

Watershed studies allocation:

	Sweeney Implementation	\$30,000
	Sweeney Wing Wall	\$50,000
Funded By Ulatis Flood Control Budget	\$75,000 Gibson Canyon	\$70,000
Funded By Administration Budget	\$642,200 Twin Creeks	\$30,000
	\$717,200 Suisun/Ledgewood	\$100,000
	New Studies	\$50,000
	Total	<u>\$330,000</u>

MEDIUM SIZED FLOOD PROJECT STATUS REPORT

April 24, 2008

This is a status report for each of the active medium sized flood projects currently being undertaken by the Solano County Water Agency.

PROJECT	STATUS SUMMARY
SWEENEY CREEK	<ul style="list-style-type: none"> • SCWA Board Approves Home Raising Program - June 14 - SCWA processing applications – Five \$25,000 payments made. Three for previously raised homes, one previously build berm, one new home raised. - Continuing to process applications
GIBSON CANYON CREEK	<ul style="list-style-type: none"> • Examining feasibility of using abandoned Vacaville sewage ponds as detention basins. • Amended contract with Wood Rodgers for LIDAR air survey work approved by SWCA Board July 12, 2007 • Amended contract approved to better characterize Sweeney overflow • Study underway
LEDGEWOOD CREEK	<ul style="list-style-type: none"> • Work completed of preliminary evaluation of open space / detention pond storage – not promising. • Project on hold for coordination with Suisun Creek Study
DIXON REGIONAL	<ul style="list-style-type: none"> • Watershed Study completed August 2001 • SCWA commits to \$200,000 for “Three Mile Connection” in 2004. • Dixon Watershed Authority requests funding for Eastside Drain Project in 2007 – application being developed.
SUISUN CREEK	<ul style="list-style-type: none"> • Study underway for consideration of multi-use detention basin to be done in conjunction with North Connector Road Project. • Possible detention basin - property interests not interested – looking for other sites • In January Board approved contract amendment to analyze other potential location.

FLOOD CONTROL – FY 2007/2008 SMALL GRANT PROJECTS

April 24, 2008

NAME	LOCATION	WATERSHED	TOTAL PROJECT COST			PAID OUT (SCWA)	STATUS
			Owner Cost-Share	SCWA Cost-Share	Total		
Louise Fong	Spurs Trail Fairfield, CA	Jameson Can. Ck.	\$7,925	\$23,775	\$31,700	\$0	PENDING: Design phase completed, owner is determining if they want to proceed on const. phase of the project.
Dennis Forfang	7717 West Ranch Rd. Vacaville, CA	Sweeney Ck.	N/A	N/A	N/A	\$0	PENDING: Site visit conducted, landowner needs to submit application. Landowner is unsure if all the owners will cost share.
Dan Speck	7484 Paddon Road Vacaville, CA	Gibson Canyon Ck.	N/A	N/A	N/A	\$0	PENDING: The application was approved by SCWA. The Agency is waiting on a Scope of Work and Cost Estimate from the owner.
Charles Pearce	4582 & 4586 Campos Lane Winters, CA	McCune Ck.	N/A	N/A	N/A	\$0	PENDING: The landowner is working with the Solano RCD on Phase 1 of this project to vegetate existing drainage ponds. During Phase 2 of the project, the landowner will be installing outlet structures and creating a new detention pond which can qualify for small grant funding.
Paul Lum	7690 Timm Rd Vacaville, CA	Sweeney Ck.	N/A	N/A	N/A	\$0	DECLINED: The irrigation tail water change project was declined because the resulting flood control benefit was not justifiable. The detention pond project along Sweeney Creek is applicable if the landowner decides to pursue the project.
Tom Brennon	4595 Beck Lane Vacaville, CA	Gibson Canyon Ck.	N/A	N/A	N/A	\$0	PENDING: A group of 12 landowners would like to improve existing drainage conditions by enlarging culverts, cleaning roadside ditches, and improving road drainage.

Totals: \$0 \$0 \$0 \$0

Amount Remaining in Small Grant Budget: \$75,000