CHAPTER 4. COORDINATION EFFORTS/ INSTITUTIONAL ISSUES

The flood control and drainage efforts of SCWA, the cities, and other agencies in Solano County (County) can be more effective through better cooperation and coordination. The Phase I report identified the cities and agencies in the County involved in flood control and/or drainage. The report also included survey responses from the cities and agencies regarding their activities, authorities, funding sources, and policies. This information was used to outline opportunities to maximize the expertise and resources of SCWA and other agencies in the County towards better flood control.

Communication and cooperation between SCWA and other agencies is continually improving. The Flood Control Task Force and working groups have held several meetings which have increased communication among the agencies and with landowners. The more recent meetings related to the direction and cost sharing for the COE projects have provided additional opportunity for local agency contact. The SCWA flood control and drainage grant program has facilitated a number of small joint projects between SCWA and other agencies, including cooperation in creek clearing with DOT and URCD and dredging projects with SRCD and landowners. The surveys completed in Phase I regarding activities, authorities, funding sources, and policies of the agencies have also provided an opportunity for SCWA and the agencies to consider their flood control roles and learn more about the roles of others.

The flood control planning, projects, and activities described in the previous chapters of this report will all require coordination with and participation of other agencies. This chapter summarizes the needed coordination efforts.

OTHER COUNTY AGENCIES

There are two other County agencies that deal with flood control, the Solano County Department of Environmental Management (DEM) and the Solano County Department of Transportation (DOT). The DEM is responsible for flood plain administration in the County. DEM also administers zoning, land use planning and annexation proposals, well and septic tank permits, building permits and building inspections, grading and land leveling permits. The DOT provides drainage services within public road rights-of-way, and areas outside the rights-of-way which affect drainage around public roads. DOT has the authority to mandate that property owners address drainage issues on their property that affect County roadways. DOT also performs services for other County departments to improve drainage and assist in emergency situations.

The DEM and DOT have substantial authority to prevent and possibly correct drainage problems where landowners are changing drainage patterns due to grading, land leveling, or ditch digging. However, it is difficult for these agencies to exercise this authority due to lack of information regarding how the changes affect the overall drainage in the area. SCWA could assist these

agencies in exercising their authority by providing information, technical assistance and review. It is recommended that SCWA:

- 1. Relay County road flooding reports received from landowners and other agencies to DOT.
- 2. Assist DOT in determining sources of and solutions to major roadway drainage problems.
- 3. Assist DEM in determining the impact of grading and land leveling permit requests on local drainage.
- 4. Provide up to date information to DEM on reported flood problems and areas of flooding risk to assist in consideration of future building permits, land use permits, and subdivision requests.

There is some overlap in responsibilities between SCWA and the DEM in flood control and drainage matters. DEM has a clear regulatory role in issuing grading and land leveling permits that have an impact on drainage. They also have the ability to approve developments conditioned upon mitigating drainage and flood control impacts. SCWA has no land use authority, but has authority to plan and implement flood control projects throughout the County. SCWA adopted a flood control objective in 1990 to "facilitate communication and coordination of flood control projects in Solano County so that projects and developments within a watershed mitigate their runoff impacts on existing and planned flood control facilities." Clearly SCWA's technical resources would be valuable to DEM, and some cities, in analyzing flood control impacts of projects. It is recommended that SCWA take the lead in reviewing public and private flood control proposals and provide technical assistance to DEM (and cities as appropriate) in the issuance of building, grading, and land leveling permits.

AGRICULTURAL DRAINAGE AGENCIES

SCWA has operation and maintenance responsibility for the Green Valley and Ulatis projects. The majority of drainage facilities in the County are private or maintained by other agencies. Major publicly maintained channels were identified and mapped in Phase I. SID, DRCD, RD2068, and other agencies have numerous channels providing agricultural drainage. These channels are not designed for flood control, yet many also convey storm runoff. The combined use of channels for both agricultural and storm runoff conveyance has raised the following issues:

- 1. Natural channels are sometimes used for irrigation drainage which encourages vegetative growth in the channels and consequent reduction of capacity.
- 2. Agricultural drains sometimes interfere with and change the natural drainage and exacerbate flooding.
- 3. The agricultural drains are the only drainage facilities in some areas and are simply not adequate.

SCWA should work with SID, DRCD, RD2068, and other similar agencies to identify where the above noted situations exist and outline common maintenance and improvement needs between the agencies. SCWA should also develop an agreement regarding the maintenance of natural channels used for agricultural drainage and seek cooperation of these agencies to increase capacity of specific drains to aid flood control.

RESOURCE CONSERVATION DISTRICTS

Resource Conservation Districts (RCDs) are special districts established by the State to address local conservation needs. These districts work closely with landowners and the USDA Natural Resource Conservation Service (NRCS). The local RCDs have been very active in flood control issues in the County. The Ulatis RCD has sponsored flood control task force working groups, Dixon RCD has represented agricultural landowners in negotiations with the City of Dixon and RD2068 with respect to flows in agricultural drainage channels, and Suisun RCD has lobbied for the preservation of the Suisun Marsh wetlands and has obtained permits for limited maintenance dredging in the marsh. SCWA should work with the local RCDs to obtain the flood control concerns of the landowners and the natural resources conservation needs within their jurisdictions.

The RCDs may participate in the flood control solutions outlined in Chapter 2, and may take the lead in some local watershed management plans. The RCDs are especially important players in local watershed management plans because they are knowledgeable of the NRCS management programs which may be included in the plans and also have experience in consensus building among the local landowners which is key in implementing the programs. The following steps are recommended to develop and implement the plans.

- 1. Define the most feasible level of flood protection and resource conservation.
- 2. Outline the interests and goals of the landowners and conservation needs of watersheds within their district.
- 3. Sponsor local watershed management plans through NRCS.
- 4. Obtain funding for local watershed management plans and programs.
- 5. Provide technical assistance for developing plans along with the NRCS.
- 6. Oversee programs as part of watershed management plans.

Because of the limited staff and financial resources of both SCWA and the RCDs, a joint effort between these agencies and other agencies has the greatest chance of success.

CITIES AND SPECIAL DISTRICTS

Drainage and flood control in the incorporated areas of the County are the responsibility of the cities or special districts including the cities of Rio Vista, Dixon, Vacaville, and Benicia, the Fairfield Suisun Sewer District, and the Vallejo Sanitation and Flood Control District. The Phase I report surveys summarized the flood control activities, authorities and funding sources

of the cities and agencies and outlined their jurisdictions on a County map. Table 4-1 summarizes how cities and agencies fund flood control activities in their areas.

Coordination between the cities and the special districts is required where the urban incorporated and the rural unincorporated areas both discharge to a regional drainage system, for example the City of Vacaville and rural Ulatis watershed areas discharge to the Ulatis project, and the City of Dixon and the rural Dixon watershed areas discharge to the DRCD drainage channels. Changes in the magnitude and timing of discharges to these drainage systems by the urban and rural interests can impact the entire system.

Many of the cities have developed plans and projects to maintain or reduce their discharges from new development to regional drainage systems. The cities of Vacaville and Dixon are building detention basins. The city of Fairfield has improved capacity on Ledgewood and Green Valley Creeks. Most of these projects have been funded through development fees. Increases in discharges to regional systems due to development in the unincorporated portion of the County are minimal because the County general plan is geared towards agricultural land use and 2 to 5 acre residential lots. However, changes in agricultural practices have resulted in increased discharges to these systems. These increases are difficult to manage and design because of the non-point source nature of the discharge.

Vacaville and Dixon have investigated solutions to improve the drainage throughout the Ulatis and DRCD systems, but the costs were too high for the cities alone to bear and the rural areas were not able to assist financially. The COE watershed management plans for the Vacaville and Suisun areas may be the best opportunity for the cities of Vacaville and Fairfield and the County to pool resources and leverage funds towards solutions which address entire drainage systems.

TRANSPORTATION AGENCIES

The mapping of reported flood problems in Phase I showed numerous problems along the highway and railroad rights of ways in the County. The highway and railroad embankments impede drainage and are bottlenecks for drainage. The embankments also create storage which in some instances may actually benefit those downstream. SCWA should use the information gathered in Phase I related to transportation drainage and work with DOT in communicating the issues to Caltrans, and the Southern Pacific and California Northern Railroads. Some of the problem drainage crossings may be scheduled by CalTrans or the railroad for maintenance or repair, in which case SCWA or DOT could provide information and/or funds for an improved crossing. Financial contributions should be sought, as appropriate, from CalTrans and the railroads.

Table 4-1. Summary of Public Agency Survey Responses - Funding Issues

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Agency	⁽¹³⁾ CIP Master Plan	^{d2} Capital Improvements	⁴³ Capital Improvement Funding	⁶⁴ Capital Improvement Fee Assessment Method	05) Operation and Maintenance Funding	deOperation and Maintenance Fee Assessment Method	⁶⁷ Fees Collected CIP/O&M/ Combined
City of Dixon	Yes	Dixon Storm Drain Master Plan 1996 update	Development fees	By area/dwelling unit at time of building permit	Annual O&M budget - general fund	N/A	\$100,000/\$75,000/ \$175,000
City of Fairfield	Yes	Planned improvements are development requirements	Development fees and requirements		Maintenance of pipes <36" in diameter are general fund supported. All ditches, creeks, and pipes >36" have maintenance supported by FSSD fee.	N/A	
City of Rio Vista	No	Repairs to storm drain system	Flood control fees go into a Storm Drain Fund	Determined through budget process. A 5-yr plan will be implemented for 97/98.	Utility bills include a \$0.45 storm drain charge per customer per month.	Agency-wide, all utility customers who have storm drains on their streets are charged.	\$200,000/\$10,00/ \$210,000
Fairfield-Suisun Sewer District	No	Provide funds for capital projects when sufficient revenues are available.	Flood control fee	N/A	Drainage maintenance fees are set by the Sewer District Board and collected as a line item on the County tax bill.	Agency-wide fees based on an engineering study of runoff contributed by various classes of property use.	-/\$1,1 m/\$1.1m
Vallejo Sanitation and Flood Control District	Yes	1992 Storm Master Plan	Currently development fees, plus reserve from previously collected drainage/ flood control fees.	None, as all come from development fees and reserve.	Monthly fee 1997/98 - \$1.97/month	Agency-wide monthly fee based on connec- tion to wastewater system and number of EDUs for wastewater service.	-/\$1.1 m/\$1.1m
Ulatis Resource Conservation District, Flood Committee (URCD)	No			Directors may establish fees for services provided by the district to, and upon the request of, persons or government entities			
Dixon Resource Conservation District	No	Capital improvements related to flood control are pending on negotiations with City of Dixon	Drainage fee	Per acre drainage fee for acres which drain to district facilities	Drainage fee	Fees assessed only in Special Zone east of railroad tracks, land- owners northwest of railroad and 1-80 declined participation.	-/-/65,()()()

May 11, 1998

Table 4-1. Summary of Public Agency Survey Responses - Funding Issues (cont'd.)

Agency	^{on} CIP Master Plan	⁷² Capital Improvements	⁶³ Capital Improvement Funding	⁴⁴ Capital Improvement Fee Assessment Method	(5) Operation and Maintenance Funding	(%Operation and Maintenance Fee Assessment Method	Fees Collected CIP/O&M/ Combined
Solano Irrigation District	No	Have a plan for improvements to the irrigation district works	General assessment district			Stand-by charge on 5 acre or larger parcels for maintenance and water charges for operations	
Maine Prairie Water District	No						
Reclamation District 2068	No	None at this time	Special assessments, service agreement fees, and non-operating revenue	District has an O&M assessment roll. Certain costs can be allocated pursuant to agreements with another agency.	No distinction is made. F/C O&M is approximately \$25,000 plus labor, machinery, and overhead (total ~\$150,000)	Based on O&M assessment roll plus charges for water service.	-/-/\$150,000
City of Vacaville	Yes	• Detention basin construction and channel, storm drain improvements to mitigate future development costing ~\$11M over a 13-yr period. See Master Plan Update for more info	Development Impact Fee	Based residential/area equivalents	 The storm drain collection system maintenance is funded through the sanitary sewer utility billing. Roadside ditches, channel maintenance funded through the general fund. 	City-wide	Varies based on development/ combined with sanitary sewer fees/-
Suisun City	No				From the Fairfield-Suisun Sewer District Funds		

- F1. Does your agency have a master plan for capital improvements for drainage and flood control?
- F2. Please provide a listing of planned capital improvements related to flood control and drainage.
- F3. How do you plan to fund these capital improvements?
- F4. Describe how the fees for funding capital improvements are assessed.
- F5. How are operation and maintenance of flood control/drainage facilities funded? (If they are part of an annual fee that includes capital improvements, please specify the breakdown.)
- F6. How are the fees for operation and maintenance assessed?
- F7. What is the rough gross annual amount collected from these fees for capital improvements?/What is the rough gross annual amount collected for operations and maintenance?