

SOLANO COUNTY WATER AGENCY



FLOOD CONTROL ADVISORY COMMITTEE Meeting Announcement

DATE: Thursday, January 28, 2016
TIME: 6:00 pm
PLACE: SCWA Office – Monticello Room
810 Vaca Valley Parkway Suite #203, Vacaville 95688

AGENDA

1. Introductions and Public Comment.
2. Approval of Agenda for tonight's meeting (January 28, 2016).
3. Approval of Minutes from December 3, 2015 meeting.
4. Ethics Training Status/Requirements.
5. Update on Small Sized Projects.
6. Update on Medium Sized Projects.
7. Review of findings for revamping Flood Emergency Alert System.
8. Review and discussion of current SCWA Flood Control Funding policy, and potential changes/updates to the policy.
9. Discussion of Future Agenda Items.
10. Remaining 2016 meeting dates: February 25th, April 28th, June 23rd (field trip) and December 1st.

If you have any questions please contact Jeff Barich at (707) 455-1109, or JBarich@scwa2.com.

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SOLANO COUNTY WATER AGENCY

FLOOD CONTROL ADVISORY COMMITTEE

MEETING MINUTES: December 3, 2015

- 1. Introductions and Public Comment:** Chairman Terry Riddle called the meeting to order at 6:00pm. The new SCWA General Manager, Roland Sanford, introduced himself and gave a little bit of his background. The new member of the FCAC appointed by the Solano Water Advisory Commission, Steve Hartwig, introduced himself. There was no public comment.
- 2. Approval of Agenda:** The Agenda for the meeting was unanimously approved.
- 3. Approval of Minutes of June 25, 2015:** The Minutes from the June 25, 2015 meeting were unanimously approved.
- 4. Ethics Training Status/Requirements:** Jeff Barich informed the Committee that Steve Hartwig, Jim Daniels, Ron Campbell, and Ron Koehne all need to renew their ethics certification per State Law AB1234 and forward a copy of the completion certificate to the Agency.
- 5. Officer Selections and Reappointments:** Ron Campbell, Ron Koehne, and Terry Connolly were all willing to continue serving on the FCAC; their new two-year terms start in January 2016. Laura Peters was absent from the meeting. She is assumed to want to continue on the Committee, so her new two-year term starts in January 2016, unless we hear otherwise from her.

Terry Riddle was unanimously recommended and appointed to continue as the Chairman, and Ron Koehne was unanimously recommended and appointed to continue as the Vice Chairman.
- 6. Update on Small Sized Projects:** Amy King (Solano RCD) presented to the Committee the status of the various Small Grant Projects that Agency is currently working on. There have been many more inquiries this year than in the past couple of years, and a couple projects have been completed and paid out by SCWA. Others are nearing completion, with the potential to be paid out this FY, but also may be pushed to the next FY. Amy informed the Committee that with the current projects contracted, and the potential for a couple more this FY, it is possible that the Small Grant Program will go over its budget of \$50,000, but in talking with SCWA, this is acceptable.
- 7. Update on Medium Sized Projects:** Steve Hartwig discussed the status of the Vacaville detention basins project. He reminded the Committee that SCWA had helped fund the

construction of a couple detention basins a few years back, and that the project is hoping to continue onto the next phase soon. Vacaville had secured funds from various sources, including FEMA, but the Native American tribe in the area protested and FEMA was forced to withdraw their \$5 million from the project. The project was just about at the construction phase when it was put on hold; it is a shovel-ready project needing money to complete. Vacaville is seeking help funding this project, and put it out there for the FCAC to have on their radar. Roland Sanford suggested that the FCAC review the Agency's funding policy for flood control projects at the Committee's next meeting to see if/how the Agency can help for this project.

- 8. El Nino Flood Watch, Emergency Alert System:** Jeff Barich informed the Committee of the various resources the Agency has for monitoring storm activity and the potential for flooding. The SCWA website contains many useful links and resources to monitor creek levels, precipitation, and even how to properly fill and install sand bags in the event of flooding. The Committee will review the resources on the SCWA website for adequacy and thoroughness.

Jeff Barich also informed the Committee of the Reverse-911 system the Agency has in place with the Solano County OES. It was suggested that possibly adding cell phone numbers to the call list would be beneficial, as fewer people are keeping landline phones these days. Also possibly adding text message or email alerts would be useful. The Agency will look into these options to supplement the existing Reverse-911 system in place.

- 9. Discussion of Future Agenda Items:** The Committee would like to talk about the following items at the next meeting:

- Feasibility of updating the emergency alert system with cell phone numbers and text messages;
- Discussing the SCWA flood control funding policy; and
- The possibility of SCWA reserves being used as carryover funds or low-interest loans for projects.

- 10. 2016 Meeting Dates:** The 2016 scheduled meeting dates are set as January 28th, February 25th, April 28th, June 23rd (field trip), and December 1st.

Next Meeting: The meeting was adjourned at 7:00pm. The next meeting of the Flood Control Advisory Committee is scheduled for Thursday, January 28, 2016 at 6:00pm at the SCWA office.

Committee Members Attending:

Ron Campbell	Terry Connolly
Jim Daniels	Steve Hartwig
Charles Karnopp	Paul Lum
Terry Riddle	Ronald Koehne

Committee Members Absent:

Steve Chappell Mark Holdener
Laura Peters

SCWA Staff:

Roland Sanford Jeff Barich

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Flood Control Advisory Committee

AB 1234 - Ethics Training

January 28, 2016

Committee Member	Date of Last Certificate	Next Training Due	Training Status
Campbell, Ron	Jan-2014	Jan-2016	Out of Date
Chappell, Steve	Feb-2015	Feb-2017	Current
Connolly, Terry	Mar-2014	Mar-2016	Current
Daniels, Jim	Dec-2015	Dec-2017	Current
Hartwig, Steve	-	-	Out of Date
Holdener, Mark	Jan-2015	Jan-2017	Current
Karnopp, Charles	Dec-2014	Dec-2016	Current
Koehne, Ronald	Jan-2014	Jan-2016	Out of Date
Lum, Paul	Feb-2015	Feb-2017	Current
Peters, Laura	Apr-2014	Apr-2016	Current
Riddle, Terry	Jun-2014	Jun-2016	Current

FLOOD CONTROL – FY 2015/2016 SMALL GRANT PROJECTS

January 28, 2016

NAME	LOCATION	WATER-SHED	INITIAL SITE VISIT	PROJECT DESCRIPTION	CURRENT STEP	TOTAL PROJECT COST			PAID OUT (SCWA)	COMMENTS
						Owner Cost-Share	SCWA Cost-Share	Total		
Gonzales/McMullen	6925 Fox Rd Dixon, CA	Gibson Canyon Ck.	7/12/12	Design for grading, ditches, culverts	6	\$2,120	\$8,480	\$10,600	\$8,480	COMPLETED: Survey and design for grading and drainage completed.
Gonzales/McMullen	6925 Fox Rd Dixon, CA	Gibson Canyon Ck.	6/12/13	Implementation of above design	2	-	-	-	-	IN PROCESS: Landowners are seeking bids for the work, details are being worked out with SID.
Margaret Preston	3512 Wells Ln Vacaville, CA	Ulatis Ck.	10/7/11	Bank stabilization, clear culverts, reinforce bridge, trash rack	6	\$1,000	\$4,000	\$5,000	\$4,000	COMPLETED: All work completed as bid.
Ron Koehne	8490 Kobert Ct. Winters, CA	McCune	11/16/11	Planning and permitting	6	\$16,060	\$21,620	\$37,680	\$21,620	COMPLETED: All work is completed.
Suzanne Salvitti	7255 Mentor Ln. Vacaville, CA	Gibson Canyon Ck.	3/8/12	Design for detention basin and swale	2	-	-	-	-	IN PROCESS: Engineering firm is working up an estimate for design work.
Aaron Jackson	8119 King Rd. Dixon, CA	RD 2068	9/15/13	Major ditch expansion along King Rd into RD 2068's system	2	-	-	-	-	IN PROCESS: County completed survey. SRCD and RD 2068 are working on cost estimates.
Virginia Sconza	602 Walnut Dr. Fairfield, CA	Green Valley Creek	9/14/15	3 arundo patches are growing right at water's edge, rooting in the creek	2	-	-	-	-	NO APPLICATION: SRCD walked the creek to map all arundo and beaver dams. SRCD staff will take care of the arundo.
Laura Fussell	6930 Bucktown Vacaville, CA	Ulatis Creek	9/15/15	Large trees have fallen into the creek and are clogging the channel	1	-	-	-	-	IN PROCESS: Landowners are working with neighbors to make sure all parcels could be worked on, will get bid from arborist.

15-16 Totals: \$19,180 \$34,100 \$53,280 \$34,100 (\$15,900 remaining)

- Step 1 - Site visit
- Step 2 - Potential project outlined
- Step 3 - Estimates for project cost submitted to landowner
- Step 4 - Applied
- Step 5 - Approved or declined
- Step 6 - Project completed, reimbursed

MEDIUM SIZED FLOOD PROJECT STATUS REPORT

January 28, 2016

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 Home Raising Program: FY 2007-2008 6 × \$25,000 payments made FY 2008-2009 No applicants FY 2009-2010 No applicants FY 2010-2011 1 × \$25,000 payment made FY 2011-2012 No applicants FY 2012-2013 No applicants FY 2013-2014 No applicants FY 2014-2015 No applicants FY 2015-2016 No applicants - Continuing to accept applications
GIBSON CANYON CREEK	<ul style="list-style-type: none"> • Examining feasibility of using abandoned Vacaville sewage ponds as detention basins. • Report shows feasible project – report submitted to Vacaville and developer for review.
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.
SUISUN CREEK	<ul style="list-style-type: none"> • Solano Transportation Authority has contracted for a 2D computer model of the watershed (including LedgeWood) to look for flood control solutions. SCWA is participating in the study.
RIO VISTA	<ul style="list-style-type: none"> • Draft Pre-Feasibility Study to mitigate impacts of potential Yolo Bypass flood control projects completed. Partially funded by Sacramento Area Flood Control Agency. Seeking funding from State to do feasibility study. • SCWA and Rio Vista are working together to apply for DWR grant funding. Rio Vista is in the process of passing a resolution allowing them to receive funding, which will be used by SCWA to hire a consultant to complete a Feasibility Study, expanding on the ideas in the Pre-Feasibility Study.

SOLANO COUNTY WATER AGENCY



MEMORANDUM

TO: Flood Control Advisory Committee

FROM: Jeff Barich, Assistant Water Resources Engineer

DATE: December 18, 2015

SUBJECT: Flood Emergency Alert System

At the December 3, 2015 Flood Control Advisory Committee (FCAC) meeting discussion took place as to the adequacy of the Solano County Water Agency's (SCWA's) emergency alert system for potential floods, and the possibility that the current system is outdated. In Solano County the individual cities have the responsibility of flood control and warning, and SCWA is responsible for flood warnings in the unincorporated areas. It should be noted, that SCWA does not have any specific flood fighting responsibilities. SCWA's responsibility is in providing information and resources to the unincorporated areas of Solano County for preparedness and warning for flooding.

SCWA currently works with the Solano County Office of Emergency Services (OES) and has a landline reverse 911 system in place. SCWA has set up two (2) zones that are likely to be experience flooding in large storm events: Zone 1 is in the Sweeney area north of Vacaville, and Zone 2 is the Ledgewood area near Fairfield. SCWA and the County maintain GIS shapefile polygons that represent these areas, and SCWA contacts the County in the event of wanting to activate a reverse 911 warning. The County then pulls all landline phone numbers that fall in the footprint of these GIS shapefile polygons, and an automated call is placed to these phone numbers warning of the likely flooding to occur. This service is only utilized for storms that SCWA determines will likely cause flooding; the system was most recently activated in 2008, and the time before that was in 2005 (it is infrequently utilized).

The FCAC brought up that most residents in Solano County are getting rid of their traditional landline phones. Cell phones are quickly taking over and making landline phones essentially obsolete. The FCAC suggested looking into new types of systems for SCWA's emergency alerts, as the usefulness of the landline system may not be very effective anymore. Systems in place throughout California include:

- Landline phone reverse 911 calling
- Cell phone reverse 911 calling
- Text message alerting
- VoIP (Voice over Internet Protocol) reverse 911 calling
- E-mail alerting
- TTY (Teletypewriter) messaging

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Upon researching these different forms of emergency alert system I found that there is significant effort and cost associated with implementing and maintaining these types of systems. Because of the high costs and efforts required, California has made emergency alerting typically a responsibility maintained at the county level. Of the 58 counties in California, 33 currently have some type of countywide emergency alert system, 20 do not have any type of system, and I could not find any information on five (5). Attached to this memo is a table of the California counties and which type(s) of emergency alert systems they have in place. To quickly summarize:

- 32/58 have landline reverse 911 calling
- 8/58 have cell phone reverse 911 calling
- 4/58 have text message alerting
- 5/58 have VoIP reverse 911 calling
- 7/58 have e-mail alerting
- 7/58 have TTY messaging

Thirteen (13) of the counties that do not have any type of emergency alert system stated that they have applied, and in some cases received, Telephone Emergency Notification Service (TENS) grant funding to implement a landline reverse 911 system. Some counties stated that individual municipalities within the county have their own local emergency alert system for their jurisdictional area only.

The FCAC suggested adding cell phone numbers to the current call lists. Unfortunately with the way the systems work, this is not possible. To be able to achieve cell phone reverse 911 calling, deals must be worked out with the mobile providers in the area (Verizon, AT&T, etc.). This is the same for text message alerting, and any other type of emergency alert systems. Internet-based alert systems cannot piggyback on with the landline service, their services and infrastructure are completely separate.

Given that SCWA is only responsible to provide warning to the unincorporated areas of Solano County, and only the two locations states above are of real concern, it does not seem to be feasible to invest in updating the system SCWA has in place. I contacted Solano County and inquired as to any thought has been given to updating the countywide emergency alert system, and I am yet to hear back. At this time, I do not think that's SCWA should pursue any new type of emergency alert system on our own. If the County does have an interest in updating the countywide system, I think it would be a good idea for SCWA to be involved and perhaps help out with the implementation.

If you have any questions, please contact me at (707) 455-1109, or JBarich@scwa2.com.

County	System?	Type	Comments
Alameda	No		Some local municipalities have system
Alpine	No		Received TENS grant, in process of implementing system
Amador	Yes	•Landline reverse 911	
Butte	Yes	•Landline reverse 911 •Cell phone reverse 911 •E-mail	
Calaveras	Yes	•Landline reverse 911	
Colusa	No		Some local municipalities have system
Contra Costa	Yes	•Landline reverse 911	
Del Norte	No		Received TENS grant, in process of purchasing system
El Dorado	Yes	•Landline reverse 911	
Fresno	No		Some local municipalities have system
Glenn	Yes	•Landline reverse 911	
Humboldt	No		Received TENS grant, in process of purchasing system
Imperial	No		Received TENS grant, in process of purchasing system
Inyo	Yes	•Landline reverse 911	
Kern	No		Received TENS grant, in process of purchasing system
Kings	No		Received TENS grant, in process of purchasing system
Lake	Yes	•Landline reverse 911	
Lassen	Yes	•Landline reverse 911	
Los Angeles	No		Received funding, in process of purchasing system
Madera	Yes	•Landline reverse 911	
Marin	Yes	•Landline reverse 911	
Mariposa	Yes	•Landline reverse 911	
Mendocino	No		Received TENS grant, in process of purchasing system
Merced	No		In the process of deploying system
Modoc	Yes	•Landline reverse 911 •Cell phone reverse 911 •E-mail	
Mono	Yes	•Landline reverse 911 •Cell phone reverse 911 •VoIP reverse 911 •TTY notification	
Monterey	Yes	•Landline reverse 911	Has capability for cell phone reverse 911, test messages, and e-mail, but not active
Napa	n/a		No information available
Nevada	Yes	•Landline reverse 911	
Orange	n/a		No information available
Placer	Yes	•Landline reverse 911	

Plumas	No		Received TENS grant, in process of purchasing system
Riverside	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Cell phone reverse 911 •VoIP reverse 911 •TTY notification 	
Sacramento	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •TTY notification 	
San Benito	No		Received TENS grant, in process of purchasing system
San Bernardino	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	
San Diego	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Cell phone reverse 911 •VoIP reverse 911 •E-mail 	
San Francisco	Yes	<ul style="list-style-type: none"> •Text messages •E-mail 	
San Joaquin	n/a		No information available
San Luis Obispo	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	
San Mateo	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Text messages •E-mail 	
Santa Barbara	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Cell phone reverse 911 •VoIP reverse 911 •TTY notification 	
Santa Clara	No		In the process of purchasing system
Santa Cruz	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •TTY notification 	
Shasta	n/a		No information available
Sierra	No		Some local municipalities have system
Siskiyou	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	
Solano	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	
Sonoma	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	
Stanislaus	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •TTY notification 	
Sutter	n/a		No information available
Tehema	No		Received TENS grant, in process of purchasing system
Trinity	No		Received TENS grant, in process of purchasing system
Tulare	No		Received TENS grant, in process of implementing system

Tuolumne	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Cell phone reverse 911 •Text messages •E-mail 	
Ventura	Yes	<ul style="list-style-type: none"> •Landline reverse 911 •Cell phone reverse 911 •VoIP reverse 911 •TTY notification •Text messages •E-mail 	
Yolo	No		Some local municipalities have system
Yuba	Yes	<ul style="list-style-type: none"> •Landline reverse 911 	

SOLANO COUNTY WATER AGENCY FLOOD MANAGEMENT PROJECT FUNDING POLICY

(Approved by Board of Directors November 9, 2006)

Introduction

Consistent with its Flood Control Master Plan, the Solano County Water Agency (SCWA) has a program to develop watershed studies to identify projects that will solve or reduce flooding problems. SCWA staff works to implement feasible projects identified in the watershed studies. This policy will be used by SCWA staff and the SCWA Board of Directors to determine if these projects are cost effective and, if so, the role of SCWA in funding of the project, including consideration for cost sharing.

For each project brought to the SCWA Board of Directors for funding, SCWA staff will perform an analysis that will include how the project meets this policy. The SCWA Flood Control Advisory Committee will participate in project review and will provide a recommendation to the SCWA Board of Directors.

This policy does not apply to the SCWA Small Project Flood Control Grant Program.

Project Development

1. In developing projects to solve or reduce flooding problems, detention storage shall be considered, as detention storage generally has less of an impact to the environment and existing infrastructure and could be designed for multi-use benefits (such as recreation, habitat and farmland preservation) and could result in more funding partners. Additionally, detention storage can have a lower maintenance cost than projects that principally require channel maintenance.
2. For each project, the level of flood protection provided (i.e. from 25 year, 100 year storms) should be compared to recent (i.e., December 2002 and December 2005) major storms to see how flood protection improvements would fare under these recent large storms.
3. For projects in areas where there is a low density of homes or other structures that would benefit from a project, consideration of ring levees and flood walls around structures or elevating structures above the flood level shall be considered.
4. A commitment for permanent maintenance of project facilities shall be required for projects receiving SCWA funds. SCWA will consider performing maintenance provided a permanent funding source is determined.
5. Permanent maintenance easements dedicated to SCWA, or fee title, will be required for project facilities receiving SCWA funds if SCWA is to maintain the facilities.

Cost Effectiveness Test

1. Projects must demonstrate a benefit to cost ratio equal or greater than 1.0.
2. The calculation shall be methods used by FEMA or the US Army Corps of Engineers in their analysis of flood management projects: The present worth of project benefits is divided by the present worth of project costs (including long term maintenance costs).

Funding of Project Capital Costs

1. Only projects that have a cost benefit ratio equal or greater to 1.0 can be considered for SCWA participation in funding of capital costs.
2. If SCWA approves the project for funding, SCWA's contribution to the capital costs shall be a maximum of one third the project capital cost.
3. The amount of capital costs to be funded by SCWA for a project will be determined by the SCWA Board of Directors on an individual project basis. When determining the amount of project capital costs to be funded by SCWA, the following shall be considered:
 - a. Public vs. private benefits. Public benefits are protection of public facilities such as roads, schools, parks and other government owned properties. Public benefits also include protection of water supply and natural habitat areas. The principal private benefit is prevention of damage to private property. The justification for increased SCWA participation in the funding of project capital costs is increased with greater public benefit.
 - b. Contributions from other public agencies. Financial contributions to a project from other public agencies are encouraged and provide an incentive for SCWA participation in funding.
 - c. Contributions from private party beneficiaries. Financial contributions to a project from private party beneficiaries are encouraged and provide an incentive for SCWA participation in funding.

Funding of Project Maintenance Costs

1. SCWA intends that these types of flood management projects provide a source of funding for permanent ongoing operations and maintenance independent of SCWA. There may be certain circumstances where SCWA may assume partial or full operation and maintenance obligations for projects where there is a specific justification to do so, such as if a flood management project is associated with an existing project for which SCWA has maintenance responsibility for or is the local sponsor (i.e., Solano Project, State Water Project/North Bay Aqueduct, Ulatis, Green Valley, or any other future project that SCWA becomes responsible for maintenance or is the local sponsor).

2. SCWA will assist in the formation of assessment districts to collect charges for maintenance of projects.

Other Criteria

1. The land use agency or agencies upstream of a project must provide assurances that future land uses or activities not accommodated by the original project design will not adversely affect the completed project. Methods that could mitigate future impacts include: detention basins, grading restrictions, erosion control, etc. Land use agencies in the project area must further demonstrate that they are enforcing land use and flood management regulations so as to not aggravate existing flooding problems by allowing development in flood prone areas without adequate safeguards to protect the property from flooding.
2. The project must fit within available funding, considering SCWA's funding priorities pursuant to SCWA's Capital Projects Funding Plan and annual budget.
3. SCWA can provide technical assistance for locating grants and other outside funding.

Rationale

1. Any project that SCWA participates in funding must be sustainable, while protecting SCWA from liability. If SCWA constructs a flood management project, but lacks maintenance access or funding to perform maintenance, SCWA could be liable for flooding damages.
2. Local land use controls are important to ensure that the SCWA investment in a flood management project is not diminished by actions of other public agencies that could approve projects that would adversely impact how the project functions as designed or would aggravate flooding problems in the project area. The type of "assurance" that would be sufficient might vary case-by-case at the SCWA Board of Director's discretion.
3. Consistent with the SCWA Strategic Plan and Integrated Regional Water Management Plan, water supply projects and flood management projects, for which SCWA has a preexisting contractual obligation (such as the Ulati and Green Valley Flood Control Projects), have a higher priority than these new, local flood management projects. However SCWA will consider funding of such flood management projects as they are developed in accordance with this policy.

SOLANO COUNTY WATER AGENCY



Guidelines for Assistance in Small Flood Control/Drainage Projects- 2008-2009 Program

A.) Introduction

The Solano County Water Agency has funding for eligible small flood control/drainage projects such as creek vegetation removal, debris removal, and limited erosion control and sediment retention. The purpose of this memorandum is to explain the process of how you can obtain assistance from the Water Agency. The Solano Resource Conservation District (SRCD) is managing this program on behalf of the Water Agency.

B.) Submission of Information

Attached is the application to be used. Describe the extent of the flooding and the frequency of the occurrence of flooding. Any historical information about the past flooding would also be helpful. Provide information about past or potential property damage from flooding.

SRCD staff can help you determine the type of work that is appropriate for the creek and the type of work that can be approved by regulatory agencies. Include a cost estimate of the work. SRCD staff can also help you with the cost estimate.

Attached is an example of the standard agreement property owners will be required to sign if your project is approved. Do not send this in with your application. Unless all property owners where the project will be done sign the agreement, the project will not be authorized for funding (an exception is made for studies and engineering). By submitting an application to us we assume that property owners will sign such an agreement.

C.) Project Eligibility

The following are criteria and requirements that will be used to judge project eligibility.

1. Landowner Permission/Waive Liability. Landowners will be required to sign an agreement (example attached) with the Water Agency, which grants permission for the work to be performed and to waive any liability claims against the Water Agency.



2. Benefit More Than One Landowner. A problem to be solved must impact more than just one property owner or is caused by something beyond the single property owner's control. For example, a clogged ditch overflows into more than one property or runoff from upstream properties runs into another property and causes drainage problems. The intent of these criteria is that the projects will benefit more than just one property owner. In most cases, a creek-cleaning project will benefit more than just one property owner.
3. No Significant Adverse Downstream Impact. This is a key criterion. Any work done with these funds must not adversely impact others downstream (or upstream). We do not simply want to transfer a flooding or drainage problem from one area to another. If there are downstream impacts, then the area impacted downstream perhaps needs to be included as part of the overall project. If downstream impacts cannot be resolved by inclusion of these properties, a study of the watershed may be needed to determine a coordinated course of action. We will be making engineering judgments on whether there are downstream impacts.
4. Landowners to Perform Ongoing Maintenance. As part of the agreement mentioned in criteria 1 above, the agreement will call for the landowner to continue regular normal maintenance of the creek after the initial cleaning is done. The intent of this provision is not to impose an open-ended responsibility on landowners. The responsibility is only to perform maintenance to upkeep the work that has already been done. For example, if large amounts of debris should accumulate on the property from upstream sources, the landowner would not be required to remove that debris as part of the agreement. Since these projects are generally on private property, we are assuming that the property owners will continue their responsibility for maintaining the creeks. For larger projects, you and your neighbors can form an assessment district where affected property owners fund ongoing maintenance. The Water Agency staff can provide technical assistance to you to set up such assessment districts.
5. 20% Landowner Contribution to Project Costs. Applicants are required to provide a 20% contribution to project costs. The contribution can be in the form of cash, provision of materials or labor. The Water Agency General Manager has the discretion to reduce the contribution requirements for special cases.
6. No Maximum Cost Limit. SRCD staff will work with you to estimate the cost of your proposed project. When developing a project, applicants need to be aware that there are limited funds available (approximately \$50,000).
7. Studies and Project Design. Studies and project design are eligible for funding.
8. Levee Repairs, Erosion Control, Tree Removal, and Sediment Retention Projects. If your project involves levee repairs, an erosion control, tree removal or sediment retention project, the following criteria also apply:
 - A. Large levee repairs may not be eligible under the small grant program.

- B. Tree removal projects are generally considered to be the landowner's responsibility and may not be eligible under the small grant program. If fallen trees are near a County Road or Bridge, Solano County personnel may be willing to remove the tree.
- C. The project must be on a stream that is an identified source of sediment.
- D. The erosion or sediment problem must have a direct impact on downstream flooding, for example a sediment from a gully plugging a road culvert and causing flooding.
- E. The original cause of the erosion problem must be beyond the landowners control to correct. For example, development in the upstream watershed has increased the flows to a channel which result in bank erosion; or channel downcutting below the property causing over-steep banks and bank erosion.
- F. The sole benefit of the project cannot be to protect the landowner home or property, while not reducing sediment production.
- G. Sediment retention projects meeting the above criteria are considered eligible for funding.

D.) Review Process

The criteria with which projects will be evaluated have been described above. If a project is rejected for not meeting one of the criteria, a written explanation will be provided to the contact person. A panel of reviewers may rank and prioritize projects. The Water Agency's General Manager will have final authority regarding which project will get funded. After the project is authorized, and the agreements are executed by all landowners, work can be scheduled and permits acquired.

E.) Project Phase

After SRCD staff have met with the landowner and visited the proposed site, the direction of the project will need to be determined. Depending on the complexity of the proposed project, a phased approach might be needed where the first phase is engineering design and the second phase is construction. Each phase of the project will require re-approval by the Water Agency to make sure funds are available. SRCD can help the landowner determine what phase the project should fall under.

F.) Design Phase

For projects that fall under the design phase, the landowner will need to work with a licensed engineer or hydrologist to prepare a (1) Scope of Work and (2) Total Cost to complete the design work. Once this is obtained, the landowner will need to submit the information to the SRCD for review. The SRCD will then work with the landowner to

further refine the study if needed and determine the cost-share. The typical cost-share for the small grant program is 20% landowner, 80% Water Agency as long as funding is available. If the landowner would like to proceed on the project, the landowner will need to sign an agreement with the Agency which will stipulate the cost-share and work to be completed. An example agreement is included at the end of this document.

G.) Construction Phase

For projects that fall under the construction phase, the landowner will first need to obtain necessary permits. The SRCD can assist the landowner with the permit process. Typical permits include the Army Corp of Engineers, the Regional Water Quality Control Board, the Department of Fish and Game, and a Grading Permit from Solano County. Once the permits are obtained, the landowner will need to obtain a bid from a licensed contractor. The landowner will then need to submit the information to the SRCD for review and to determine the cost-share. The typical cost-share for the small grant program is 20% landowner, 80% Water Agency as long as funding is available. If the landowner would like to proceed on the project, the landowner will need to sign an agreement with the Agency which will stipulate the cost-share and work to be completed. An example agreement is included at the end of this document.

H.) Reimbursement

The small grant program is a reimbursable grant, which means that the landowner will need to pay the engineer or contractor directly, and then submit invoices from the company that state "Paid in Full". Once the paid invoices are received the Water Agency will issue a check to the landowner. The reason for the reimbursement process is to prevent the transfer of liability to the Water Agency for the private flood control project, which would be undesirable for both the landowner and the Agency.

I.) Timing

The goal is to complete projects prior to the upcoming rainy season. The ability to complete the work depends on many factors including landowner cooperation, and availability of labor to perform the work and the permitting. It also depends upon when the rainy season starts.

(SRCD to determine is in initial deadline is desirable or take applications all year long)

J.) Help

SRCD staff can help you propose your project and prepare your application. We can provide maps and lists of property owners. We can visit sites with you and review the potential of downstream impacts. We can also tell you the type of work that regulatory agencies may allow in your particular situation. For assistance please contact Amy King at (707) 678-1655 ext 109 or e-mail at amyking@gmail.com.

If your project does not receive funding there are other options. As described previously, you and your neighbors can form an assessment district where property owners fund improvement and ongoing maintenance. The Water Agency staff can provide technical assistance to you to set up such assessment districts. These districts can be operated under the authority of the Water Agency. Additionally, if you choose to solve your problems without any funding from this program, we can also provide technical assistance to you and help you get the necessary permits.

FLOOD CONTROL – SMALL GRANT APPLICATION

I.) Contact Information:

Name _____

Date _____

Address _____

Telephone _____

II.) Description of the Flood Problem:

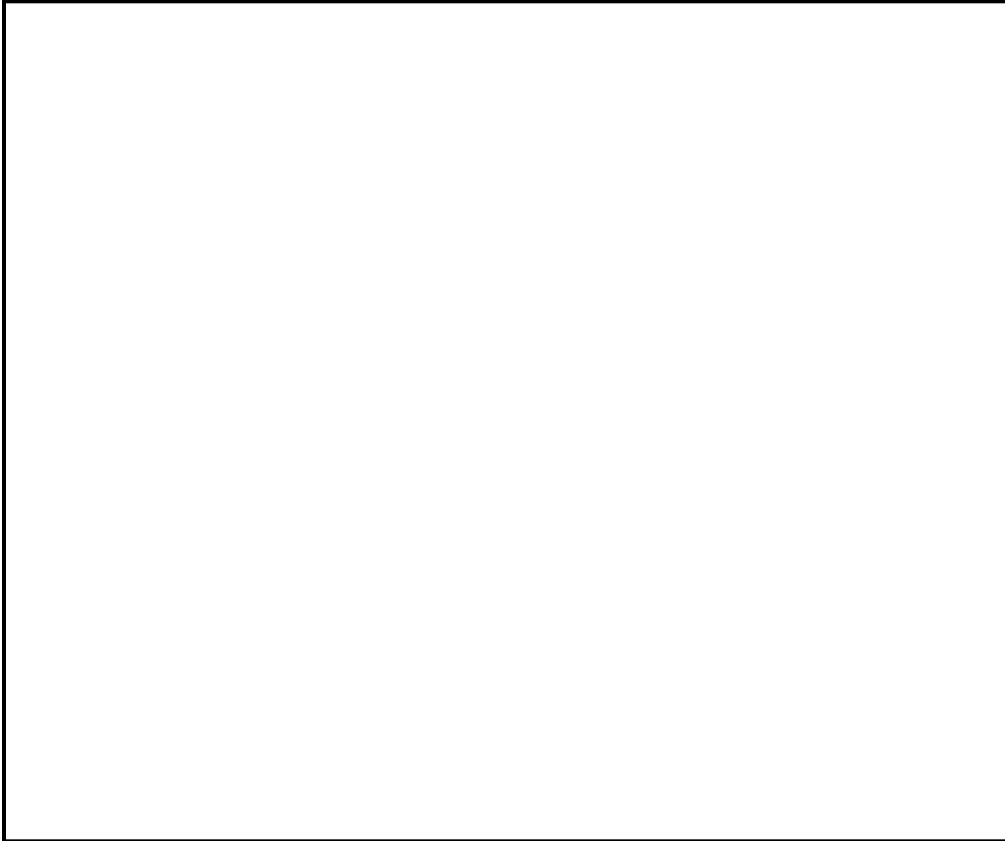
(What is happening, when does it happen, who is affected?)

III.) Identification and Solution to the Flood Problem:

(Where it is occurring and what is the solution?)

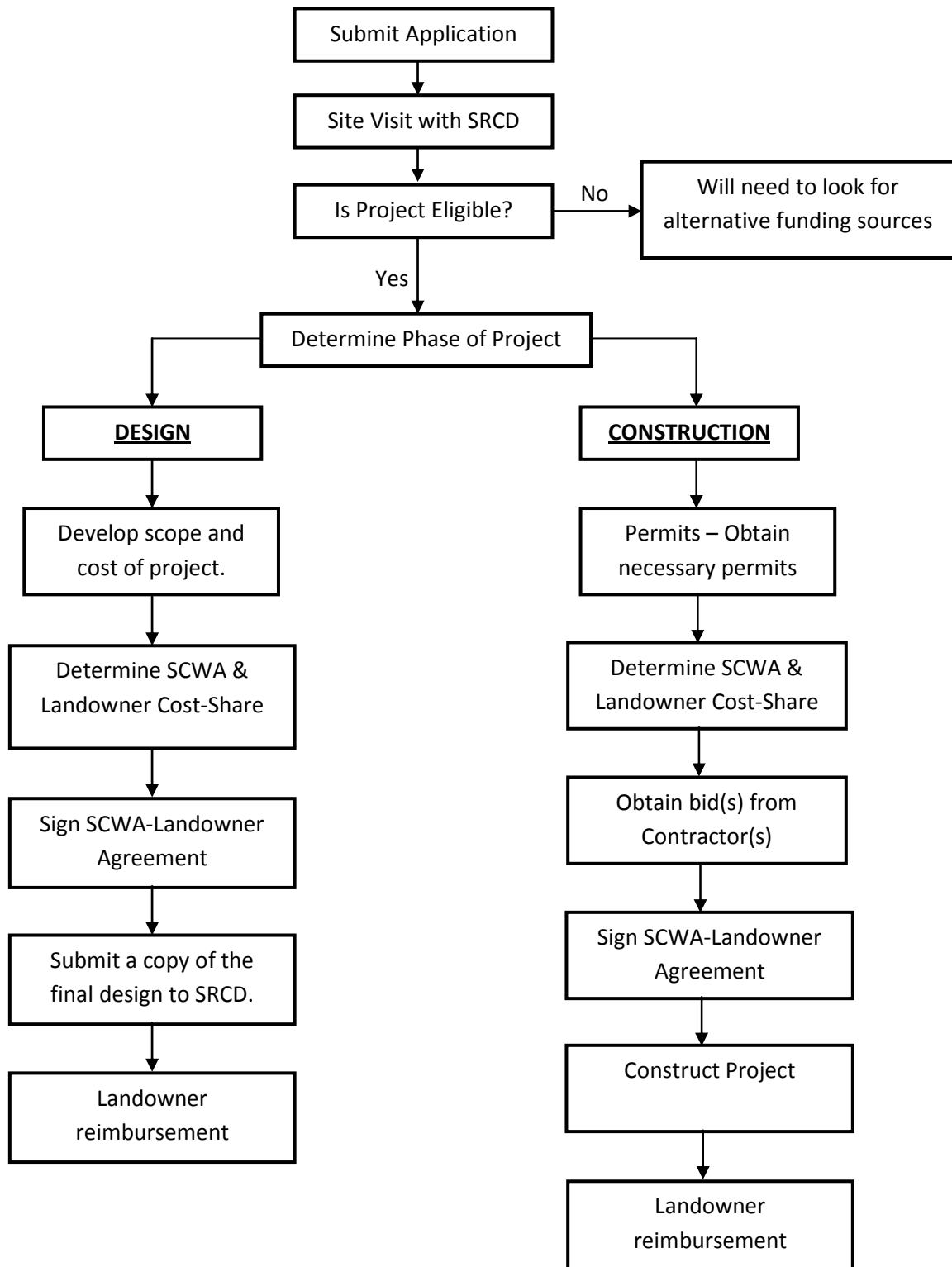
FLOOD CONTROL – SMALL GRANT APPLICATION

IV.) *Map:*
(General overview map showing creek, culverts, and roads. Photos can also be attached to the end of the application)



V.)

Figure 1 – Flowchart of the Small Grant Flood Control Process



**AGREEMENT BETWEEN PROPERTY OWNER
AND THE
SOLANO COUNTY WATER AGENCY
FOR
FLOOD CONTROL PROJECT**

This AGREEMENT BETWEEN PROPERTY OWNER AND THE SOLANO COUNTY WATER AGENCY FOR FLOOD CONTROL PROJECT ("Agreement") is entered into as of the _____ day of _____, 2008 by and between _____ ("Owner") and the SOLANO COUNTY WATER AGENCY ("Agency").

1. Recitals.

A. Owner is the owner of certain real property described in Exhibit "A" attached hereto and by reference made a part of this Agreement ("Property").

B. The Agency has general authority to undertake projects to control flooding and storm waters within all of the Agency's boundaries in order to protect life and property from floods within the Agency.

C. The Agency Board of Directors has approved a limited program whereby the Agency provides assistance to property owners for cleaning creeks and ditches of vegetation, debris, and sediment and certain erosion control projects. The Agency has developed specific criteria for these projects and only projects meeting these criteria are approved. All these projects require all participating landowners to execute agreements similar to this Agreement.

D. The project, described in Exhibit "B", the Project Description, attached hereto and by reference made a part of this Agreement, hereinafter referred to as the "Project", has been specifically approved by the Agency.

2. Scope of Work. By their signature to this Agreement, the parties have agreed to the Project Description. Owner is responsible for all work to complete the Project.

3. Term. The term of this Agreement shall commence on the date of execution and shall continue thereafter as long as the Owner retains ownership of the Property. The Agency will not record this agreement with the County Recorder. If the Project is not completed by June 30, 2009, this agreement shall terminate.

4. Payment. Upon completion of the Project, as determined by the Agency, and upon submission of copies of invoices of the work done, payment of the lesser of 1) the total Project costs or 2) \$_____ shall be made by the Agency to the Owner.

5. Indemnity. To the fullest extent permitted by law, Owner will defend, indemnify and hold harmless the Agency, its directors, officers, employees, or authorized volunteers against any and all claims and demands of all persons arising out of or in any manner directly or indirectly connected with the work performed under this agreement, however caused, except for the sole negligence or willful misconduct or active negligence of the Agency its directors, officers, employees, or authorized volunteers. This indemnity shall survive the termination or expiration of this Agreement.

6. Permits and Compliance with Law. Owner shall obtain and maintain all governmental permits and approvals required for the activities conducted under this Agreement and shall comply with all statutes, ordinances, rules, regulations, orders and requirements now in effect or that become effective during the term of this Agreement applicable to its work to be undertaken pursuant to the Project Description.

IN WITNESS HEREOF, Agency and Owner have executed two (2) original copies of the Agreement as of the date first referenced above.

"Agency"

SOLANO COUNTY WATER AGENCY

By:

General Manager
P.O. Box 349
Elmira, CA 95625

"OWNER"

Parcel No. _____ et. al.

By:

_____,

EXHIBIT A – Property Description

Parcel Nos. _____

EXHIBIT B – Project Description

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