

## **SCWA FLOOD HAZARD WARNING SYSTEM**

### **Introduction**

The SCWA Board of Directors authorized a Flood Hazard Warning Program at their March 9, 2006 meeting. The purpose of this program is to provide timely information to public agencies and the general public on potential flooding in Solano County.

### **Program**

SCWA has a system of stream and rain gages. These gages are strategically located to provide information on potential flooding to populated areas of Solano County. Data from these gages are sent by telemetry to the SCWA office and put on SCWA's web page – <http://www.grabdata.com/floodmap/> in real time. This data, along with data from gages and forecasts from other public agencies in Solano County and outside of Solano County will be utilized in the Flood Hazard Warning System.

SCWA staff will closely monitor any storm predicted to be one-inch over 24 hours. This monitoring will occur on a 24 hour per day, 7 day a week basis, as needed. November through April is active forecasting, but any major storm events outside of this time period will also be monitored. The interval of monitoring will depend on conditions. The default condition will be that forecasts will be done in the mornings on days when there is one inch or more rain forecasted within the next six days. The SCWA web page will be the main source of disseminating this information. During potential flood conditions forecasts will be made more frequently and the web page may state the frequency of upcoming forecasts.

The following level indicators will be used to characterize the risk of flooding in Solano County and the level of monitoring/warning to be done by SCWA staff.

Level 1. May through October. Not the rainy season. SCWA will watch daily forecasts for unusual events. It is possible that flooding can occur, but not likely.

Level 2. November through April (when not in Level 3). This is the season where flooding is most likely to occur. Forecasts will generally be done when there is a storm that is forecasted to rain 1" or more in a day. Level 2 is when everyone should be prepared for flooding and watch for reports of impending large storms that would trigger Level 3. SCWA will watch daily forecasts storms that may trigger Level 3.

Level 3. Whenever a potential flooding scenario is possible. For example, when a 2" or greater storm over 24 hours (or less) is predicted. SCWA will monitor storm patterns regularly (several times a day) during Level 3 to update short term forecasts. These types of storms may warrant a County Office of Emergency Services telephone warning to flood prone areas in the unincorporated areas of Solano County. Cities do their own flood warnings.

SCWA staff will analyze data to predict possible flooding. Relating rainfall data to flooding is not a precise process. A flooding forecast will need to be conservative and reflect our limited ability to actually predict flooding. Based on SCWA staff experience over the last several years, we have a general sense of what types of storms cause flooding in certain locations. Over time, we will be able to better document what amounts of rain can cause flooding in specific areas in the County, including consideration of antecedent conditions. We need to be careful not to convey over confidence in predicting flooding.

In Solano County there is a short warning period of floods. The streams coming out of the foothills from the western part of the County are extremely close to populated areas. In other areas of California, and in other states, there can be days of warning of an upcoming flood. In Solano County flood warnings can only be predicted in a matter of hours and minutes. This necessitates the need to provide both longer term and shorter term forecasting. The longer term forecasting can provide a general level of warning one to two days in advance. Short term forecasting can be several hours in advance of a flooding event. Both long term and short term forecasts can be updated as needed. Short term forecasting can be updated as frequently as 15 minutes in a major storm. The 15 minute interval is from the period Doppler radar is updated on the internet.

We also have a recorded telephone message for those who do not have access to the internet. This recorded message will be the same as the message on the internet and will be updated as the internet is updated. The recorded message will be available 24 hours per day. The telephone number is: 455-1115.

The general public will be kept informed via the webpage, telephone recorded message and any press releases.

Based on our experience in dealing with flooding problems in unincorporated areas, we have developed a working map, from SCWA records and County records of past flooding, showing flood prone areas. In a Level 3 situation, we will make recommendations to the County Office of Emergency Services on advising people who live in these areas, when appropriate, using the County's "reverse 911" system of warnings. This system allows a recorded message to be sent out to a specified, geographical area via the telephone system. Cities make their own decisions on flood hazard warnings.

SCWA staff will be present in the County's Emergency Operations Center when the Center is activated during flood emergencies. That staff person will be linked to other SCWA staff and have real time data about flooding problems.