SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors **AGENDA NO. V-D**

FROM: Steve Mack, General Manager

Meeting Date: August 6, 2009

SUBJECT: DISCUSSION/ACTION RE RUSSIAN RIVER WATER SHORTAGE

RECOMMENDED ACTION: Receive a report from staff discussing recent events associated with the Russian River water shortage.

FISCAL IMPACT: none.

DISCUSSION:

Because of the water shortage situation in the Russian River, staff will present a monthly update on associated activities. Below are summaries of related activities and information from this past month:

Flows at Hacienda. The Board Order allows minimum flows to be reduced to 35 cfs in the lower Russian River after July 6, 2009 until October 2, 2009 if storage in Lake Mendocino was below 65,630 af on July 1, 2009. At the May 28 public meeting Sonoma County Water Agency (SCWA) staff stated that they thought the flows could be maintained at at least 50 cfs in the lower Russian River through October 2 and still maintain adequate storage in Lake Mendocino for fall fish releases. The Hacienda Bridge is the flow measurement spot for the lower Russian River. Figure 1 shows summer flows at Hacienda Bridge for a number of years – 1977 which is the worst year on record, 2007 which is the most recent year that a Temporary Urgency Change allowed a reduction in the minimum flow to dry year levels (85 cfs), average daily flow for this decade, and daily flow recorded for 2009, along with a projection done starting June 14 for flows this summer. The flow projection is based on a 50 cfs flow after July 6 – the line representing this year's flow shows that the lowest flow reached this summer so far has been 59 cfs and it has since rebounded into the lower 70's. Figure 1 is on the District website and updated on a weekly basis.

District flow measuring effort. The Board Order requires a 35 cfs minimum flow in the lower Russian River from the Dry Creek confluence to the Pacific Ocean. The measuring point for that flow is at the Hacienda Bridge which is many miles (approximately 20-25 river miles?) from the Pacific Ocean. Flow in an open channel rarely stays at a constant level for such a long distance, the question is whether it is increasing or decreasing. District staff have the capability to measure this flow at several locations and will be doing so this summer.

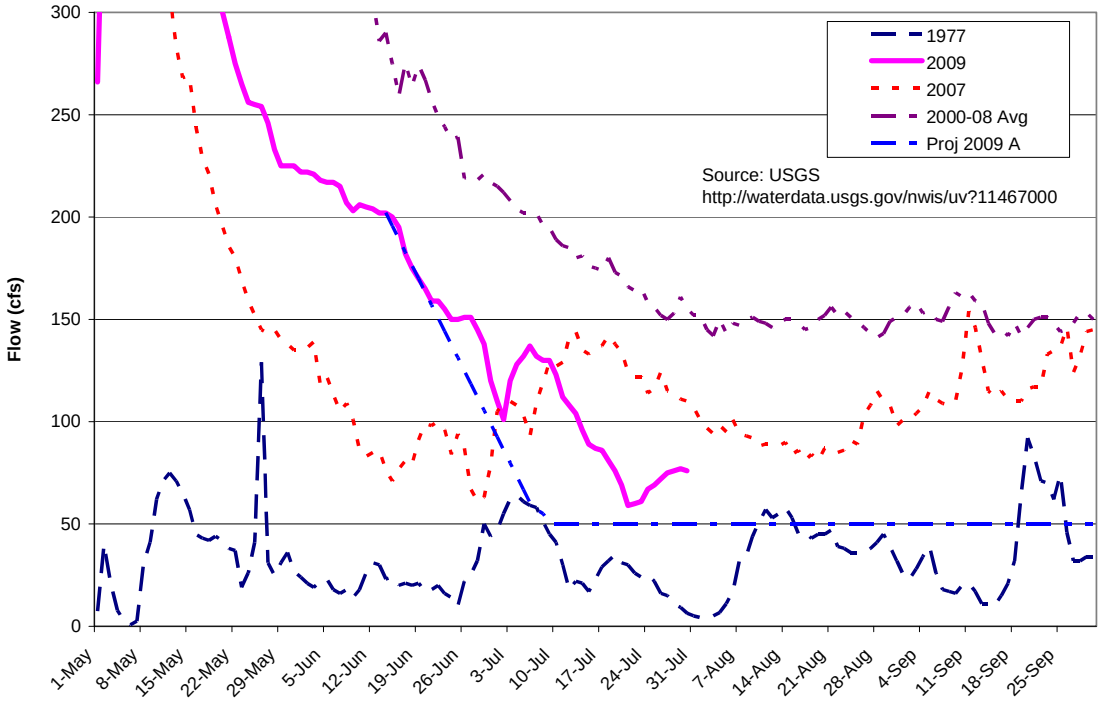
To date District staff have measured flow twice at the Vacation Beach summer crossing. On July 14 the measured flow was 101 cfs while the reported flow at Hacienda was 97 cfs. On July 23,

measured flow was 56.2 while reported flow at Hacienda six hours earlier was 68 cfs. Staff will continue to measure flow to determine if there is a trend.

Lower River Water Quality. Figure 2. Johnson's Beach Water Quality shows water quality constituents from data reported by Sonoma County Water Agency from a continuous recording device located at Johnson's Beach which is the lowest most point these data are being recorded. The figure shows no striking trends that might raise a concern. The data reported also are consistent with quality constituents in the water pumped by District wells.

Summer Water Use. Figure 3. April through September Monthly Sales shows summer water sales for 2004 (the base year), 2008, 75% of 2004 and water production for 2009. The figure shows that in July we met the 25% goal for sales. It should be noted that July data are for meters read in early July and represent sales from Monte Rio and part of the Guerneville system for water used in May and June. Also, the District found an underreporting meter in one of our largest customers (this has been fixed) which also reduced the sales amount. Production during that period does not show the same percentage reduction.

Figure 1. Russian River Summer Flow
Hacienda Bridge, updated July 31, 2009



Projected 2009 based on State Board approved TUC minimum flows and SCWA public statements

Figure 2. Johnson's Beach Water Quality Data
4 Hour Intervals

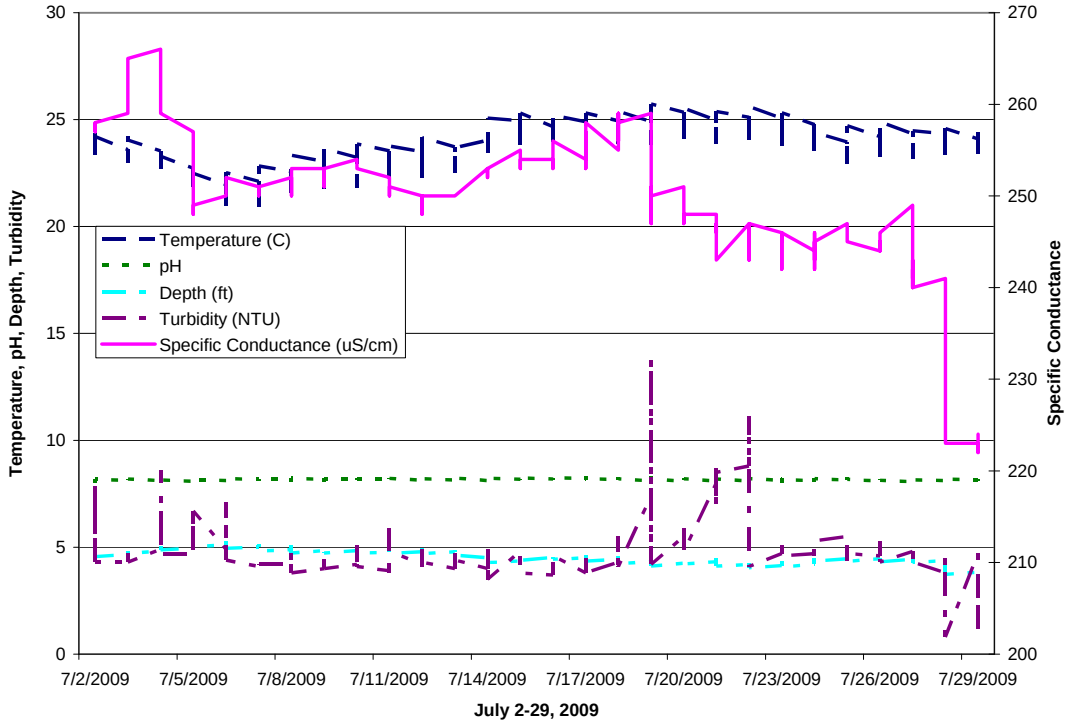
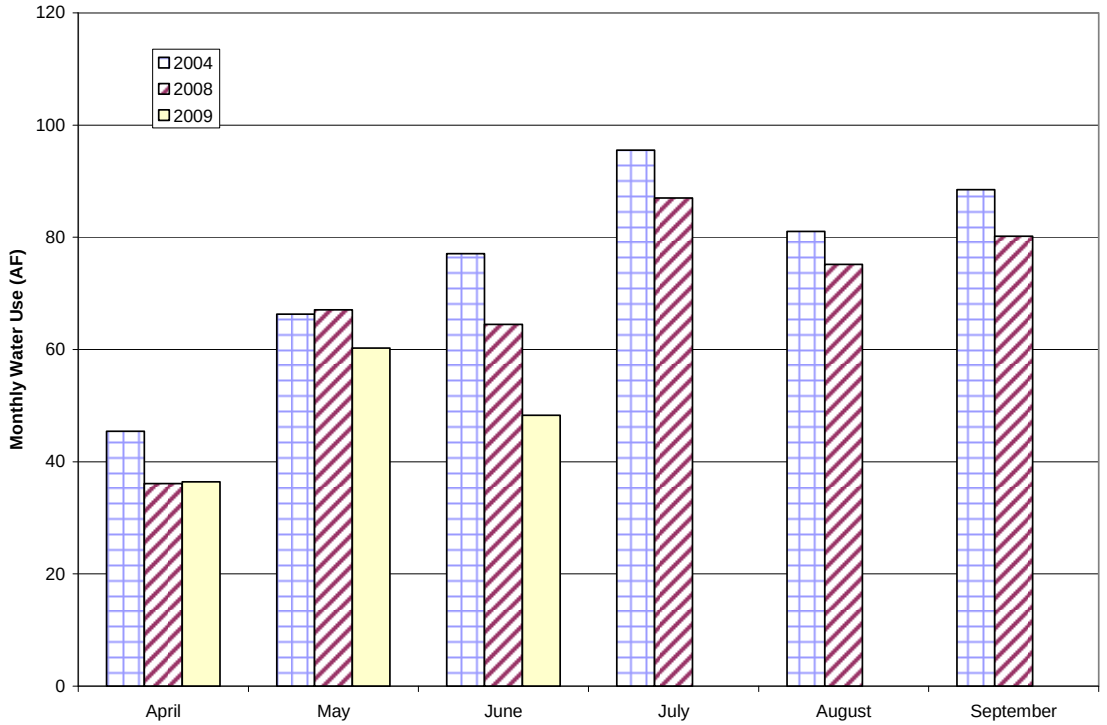



Figure 3. April through September Monthly Sales
Sweetwater Springs Water District