SWEETWATER SPRINGS WATER DISTRICT

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

FROM: Steve Mack, General Manager

Meeting Date: July 9, 2009

SUBJECT: DISCUSSION/ACTION RE RUSSIAN RIVER WATER SHORTAGE

RECOMMENDED ACTION: Receive a report from staff discussion 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 in this past month:

Board did issue revised Order. On May 28, the State Board did issue a revised Board Order. It kept in place much of the earlier order. Notable small changes were a revision to the ban on turf irrigation and more detail on the monitoring effort. The Order changed the date of the reduction of minimum flows to Critical Water Supply Condition levels (35 cubic feet per second (cfs)) to July 6 and changed the trigger – water storage in Lake Mendocino at 65,630 acre feet (af). As of June 30, 2009, storage in Lake Mendocino was at 56,727 af and it is very unlikely storage will rise to the 65,630 af trigger.

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 is below 65,630 af and as stated above it appears that storage will be below that. 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 current trend indicates flows may be higher than that. 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. It's a historic opportunity to measure flows at this level – it hasn't happened since 1977.

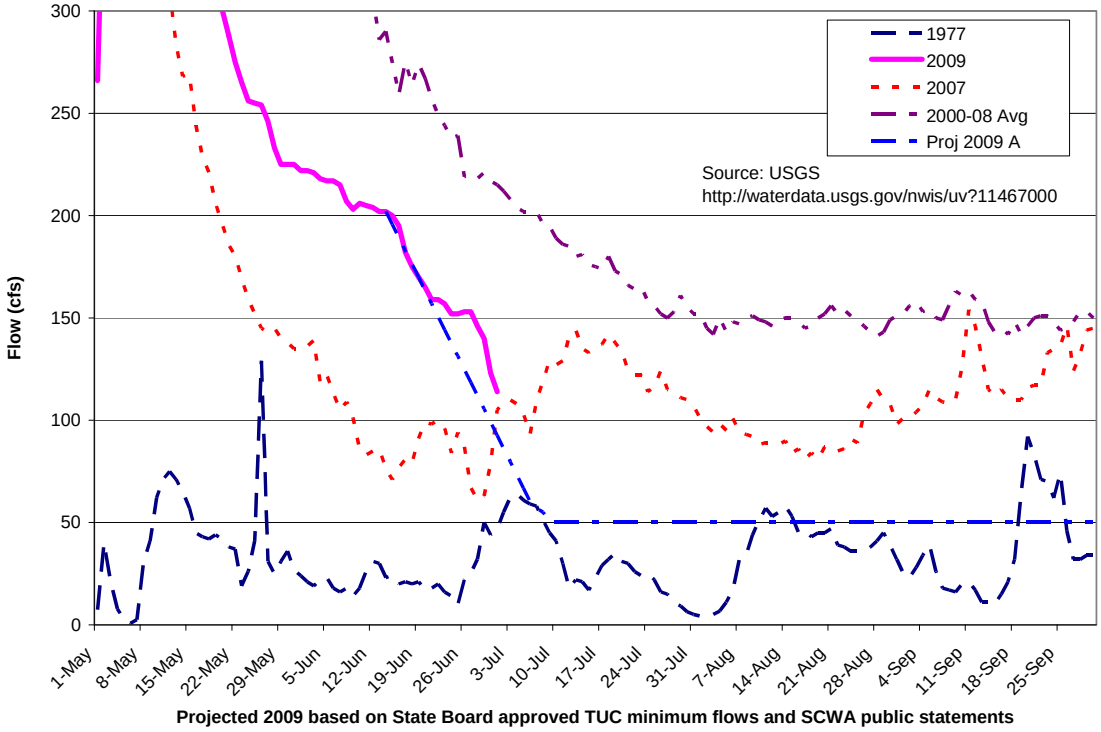
Jenner Beach Barrier Public Meeting. On June 22 I went to a public meeting sponsored by SCWA at Jenner to hear about issues relating to the Biological Opinion (BO) requirements on the Beach Barrier at Jenner at the mouth of the Russian River. The BO requires that SCWA conduct its activities at the beach barrier such that it keeps a closed estuary through the summer at a level of 7 feet above mean sea level (or some other similar designation). Historically SCWA has mechanically kept a channel open to the sea. This issue is not directly related to low flows in Russian River, but because it does affect water levels and potentially water quality in the lower Russian River, it is worth keeping track of.

At the meeting, National Marine Fisheries staff explained the beach barrier issue as it relates to the BO and other staff explained activities related to the beach barrier. Apparently a big issue is how this will affect marine mammals and a permit is needed to change SCWA activities at the beach barrier. NMFS staff explained the science and theory behind keeping the barrier intact. Many of the meeting attendees expressed concerns about the impact of keeping the barrier intact on marine mammals.

At the time of the meeting the barrier was intact, the estuary level was approximately 5 feet above mean sea level, and this was noticeable upstream at the Monte Rio Bridge. By Sunday the barrier had broken and there was a channel from the Russian River to the ocean. It will be interesting to see how manageable keeping an intact beach barrier really is.

Summer Water Use. Figure 2 shows summer water production for 2004 (the base year), 2008, 75% of 2004 and water production for 2009. The Figure shows that we are not meeting the 25% reduction objective and we producing a little less water than last year. However, it must be noted that this reduction request was not made formal until late May and there isn't much of a regional program to get a unified message out. The District has no formal direction from the State Board to reduce water production (the regional reduction target is actually for water sales) for any set amount and only has an implied request to participate in a regional program designed to reduce overall water use by 25% which appears to be happening.

Figure 1. Russian River Summer Flow
Hacienda Bridge, updated July 2, 2009



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

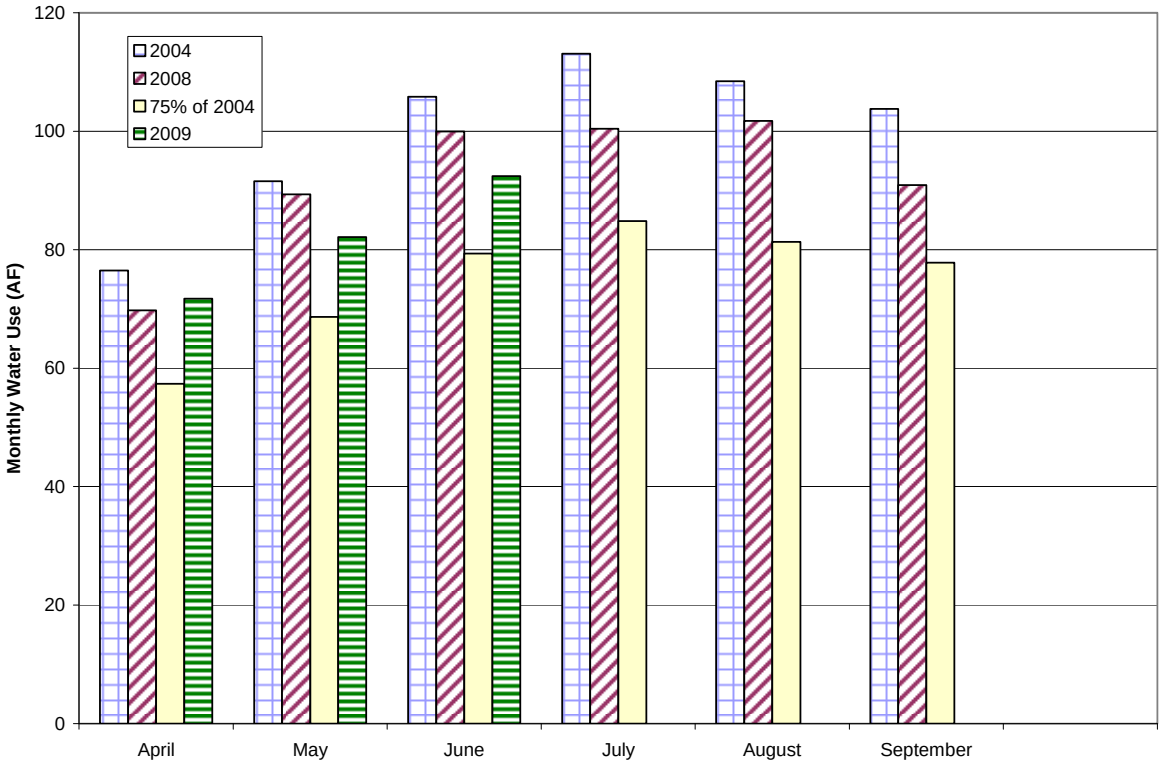



Figure 2. April through September Monthly Water Use
Sweetwater Springs Water District