

**Sonoma County Water Agency
Temporary Urgency Change Order WR 2007-0015-DWR
Temperature Monitoring Plan
Russian River
May – October 2007**

Background

This Temperature Monitoring Plan (Plan) is submitted in accordance with State Water Resources Control Board (State Board) Division of Water Rights Order WR 2007-0015-DWR (Order), approving a Temporary Urgency Change in Permits 12947A, 12949, 12950, and 16596 of Sonoma County Water Agency (SCWA). Provision 8 of this Order requires SCWA to prepare a Temperature Monitoring Plan for the Russian River and Lake Mendocino and submit it to the Chief of the Water Rights Division by May 24, 2007.

Additional water quality parameters are addressed in the Water Quality Monitoring Plan required by Provision 9 of Order WR 2007-0015-DWR.

Summary

Measurements of water temperature in the Russian River will be taken by multi-parameter sondes equipped with a combination of sensors including temperature. The sondes include data loggers which record the measurements of the individual sensors. The deployment of the sondes in the mainstem Russian River is as follows (from upstream to downstream):

- Hopland
- Diggers Bend (near Healdsburg)
- Mirabel (near SCWA diversion facilities)
- Hacienda
- Johnson's Beach (near Gurneville)
- Freezeout Creek
- Sheephouse Creek
- Bridgehaven
- Patty's Rock
- Mouth of Russian River @ Jenner

The locations of the data loggers are shown in Attachment A. Additionally, the Mendocino County Water Agency records the water temperature every 80 minutes at a location just downstream of Coyote Dam. Finally, the SCWA, the North Coast Regional Water Quality Control Board (NCRWQCB) and the United States Geological Survey (USGS) will record water temperatures during their respective water quality sampling events.

SCWA Permanent Sondes – YSI 6600 Water Quality Samplers

The SCWA Operations Division has maintained five YSI 6600 multi-parameter water quality sondes on the Russian River for several years. They are located at Hopland, Diggers Bend in Healdsburg, SCWA's river diversion facility at Mirabel, Hacienda and Johnson's Beach. The sondes take readings of water temperature every 15 minutes and transmit the raw data via telemetry to the SCWA operations center. This data has been made available to the public via an automated email. The SCWA will post a link to a "subscribe" button for those additional persons wishing to receive the data electronically. These five sondes are referred to as "permanent" as SCWA intends to maintain them indefinitely into the future.

SCWA Seasonal Sondes – YSI 6600 Water Quality Samplers

SCWA expects to deploy a multitude of sondes in the lower river by the end of May 2007. The sondes will be installed near Freezeout Creek, Sheephouse Creek, Bridgehaven, Patty's Rock and at the mouth of the Russian River at Jenner. These sondes take a temperature reading every hour. The data are stored in the unit until it can be downloaded by field personnel. SCWA personnel download the data in the field every two to three weeks.

Mendocino County Water Agency

The Mendocino County Water Agency deploys seasonal water temperature sensors with data logging capabilities. They expect to deploy a temperature sensor approximately 1,600 feet downstream of Coyote Dam. The Mendocino County Water Agency has agreed to provide the raw data as downloads become available.

Data Analysis

If at any time the raw data indicates that the temperature in the Russian River appears to be higher than in previous years or if SCWA environmental specialists or engineers see cause for concern, SCWA will consult with the NCRWQCB and State Board on a preferred course of action.