

## **Your Watershed**

**By: The Russian River Watershed Association**

### **Facing Climate Change in the Russian River Region**

Climate change is a global process with some very real, local impacts on the Russian River and the people who live and work in Sonoma, Mendocino and Marin counties.

We know, for example, that four of the last eight years have had unusually low springtime rainfall. This year's March and April were the driest March and April on record. Dry spring conditions leave insufficient water storage to support flow in the river during salmon migration in the fall. The low water storage also impacts agriculture, recreation and urban water users.

California Department of Water Resources scientists reported that rainfall variability has increased over the past century and that rainfall variability is projected to continue to increase. We can anticipate more weather extremes with local flooding, property damage and possible threats to human health and safety.

Streams like the Russian River which lie in basins without significant snowpack will likely be warmer in the dry season than in the past. Juvenile coho salmon and coastal steelhead trout remain in fresh water through the summer and are vulnerable when water temperature increases. Climate change could make coastal streams too warm for coho salmon in the summer resulting in further losses for the species and leading to severe economic impacts from application of endangered species measures.

Perhaps the most certain impact of climate change is a rise in sea level that has been measured at 0.6 feet at present and projected to reach almost three feet by year 2100. The rising sea level will affect the estuary and could impact people who live in low-lying coastal areas or draw water supply from coastal aquifers.

Cities, counties and special districts that are members of the Russian River Watershed Association support projects and programs to help reduce climate change by reducing greenhouse gas emissions. The association also works hard to support planning and statewide funding for programs that help the watershed adapt to the inevitable changes headed this way.

The Russian River Watershed Association encourages residents to join in this effort by taking action to reduce water use this summer and making personal choices to reduce their personal greenhouse gas emissions. For a list of the Top Ten Tips to reduce your water use, contact your local city or water district or visit the Sonoma County Water Agency's Web site at [www.sonomacountywater.org](http://www.sonomacountywater.org). For information on simple ways to reduce your energy use, visit <http://www.flexyourpower.com/>

*This article was authored by Tim Anderson of the Sonoma County Water Agency on behalf of RRWA. RRWA is an association of local public agencies in the Russian River*

*Watershed that have come together to coordinate regional programs for clean water, fisheries restoration and watershed enhancement.*