

Russian River Water Forum
Water Rights and Water Management Technical Briefing – June 22, 2023

Background on Russian River Water Sources and Water Rights

Brief prepared by Ryan Bezerra, Bartkiewicz, Kronick & Shanahan

In California, different kinds of water rights can apply to different sources of water in a river. The Russian River has at least three sources of water and water rights' application varies depending on the source and the diversion location.

1. Sources of Water and Relevant Locations

The Russian River can be divided into “upper” and “lower” sections. The divide is where Dry Creek flows into the river’s mainstem near Healdsburg. The upper Russian River is the section between where the East and West Forks meet (below Lake Mendocino) and the river’s confluence with Dry Creek. The lower Russian River is below that confluence. Sonoma County Water Agency (Sonoma Water) manages water-supply releases from Lake Sonoma to Dry Creek. Those releases often augment, in the lower Russian River: (A) Upper Russian River flows that reach the Dry Creek confluence; and (B) natural flows in Dry Creek and the lower river. Sonoma Water has the right to divert Lake Sonoma releases from the lower Russian River for use within Sonoma Water’s water-transmission system.

The upper Russian River’s water sources are as follows:

- **Natural flow.** This flow derives from precipitation in the upper Russian River watershed.
- **“Abandoned” Potter Valley Project (PVP) water.** Since 1905, the PVP has imported water from the Eel River to the powerhouse on the Russian River’s East Fork upstream of Lake Mendocino. PG&E operates the PVP under a Federal Power Act license issued by the Federal Energy Regulatory Commission (FERC). With the exception of water that PG&E delivers to the Potter Valley Irrigation District upstream of Lake Mendocino, PVP releases currently are “abandoned water” downstream of the PVP’s powerhouse because PG&E does not use them under the FERC license. These releases have declined over time:
 - Before 2007 regulatory changes associated with FERC’s 2004 issuance of a new license to PG&E, an average of 150,000 acre-feet per year (AFY).
 - From 2007 to 2020, an average of 60,000 AFY.
 - Since 2021, an average of 40,000 AFY. Beginning in 2021, FERC approved variances requested by PG&E to specifically reduce releases to the Russian River watershed.
- **Stored water from Lake Mendocino.** Sonoma Water manages water-supply and minimum streamflow releases from Lake Mendocino as the local sponsor of this U.S. Army Corps of Engineers project. Sonoma Water and the Mendocino County Russian River Flood Control and Water Conservation Improvement District (RRFC) hold 1949 water rights to store water in Lake Mendocino. That water is both East Fork natural flow and “abandoned” PVP releases that are not required for downstream senior water-right holders. Lake Mendocino can store about 122,500 AF. Sonoma Water can use up to 37,544 AFY, and RRFC can use up to 7,940 AFY, from Lake Mendocino.

2. Types of Water Rights and Application to Russian River Water Sources

There are two basic kinds of water rights in California: (A) riparian rights, which attach to land along a stream (and its underflow) for the use of the stream’s natural flow on that land; and (B) appropriative rights, which allow use of any water in a stream for use on any land. Riparian rights generally have priority over appropriative rights as to a stream’s natural flow.

Appropriative rights generally have “first in time, first in right” priorities, so the oldest one authorizes diversions of water before the second-oldest one and so on. The following types of water rights generally apply in the upper and lower Russian River:

- **Riparian rights and natural flow.** The lands next to the river have riparian rights, but those water rights attach to natural flow and **not** to PVP “abandoned water” or to storage releases. If PVP abandoned water and storage releases from Lake Mendocino and/or Lake Sonoma are the only water available, riparian right-holders **cannot** divert it legally.
- **Pre-1949 appropriative rights.** The year 1949 is key because it is the priority date for Sonoma Water’s and RRFC’s rights to store water in Lake Mendocino and deliver it later. Pre-1949 rights generally: (A) have priority over Sonoma Water and RRFC to natural flows **and** PVP abandoned water on the pattern the PVP releases it; **but** (B) include no right to water stored from either natural flows or PVP releases when it is released from Lake Mendocino, unless there is a contract or other arrangement with Sonoma Water or RRFC. One caveat is that pre-1905 appropriative rights do **not** attach to PVP releases because those releases did not exist when those rights were initiated.
- **Post-1949 appropriative rights and “10,000 AFY reservation.”** In general, post-1949 rights would be junior to Sonoma Water’s and RRFC’s rights to store water in Lake Mendocino and later use it. A caveat is that a term of Sonoma Water’s water-right permit reserves 10,000 AFY of Lake Mendocino water for the use of post-1949 appropriators located in Sonoma County in the Russian River valley. The State Water Resources Control Board appears to have issued many post-1949 permits to these appropriators. Much of the “10,000-AFY reservation” has been consumed, but it is unclear if it has been exhausted.

3. Potential Effects of Changes at the Potter Valley Project

PG&E currently operates the PVP under annual FERC licenses that continue the 2004 license’s terms, but has indicated to FERC that it intends to stop operating the PVP. It therefore is uncertain how much Eel River water, if any, will be released to the Russian River watershed in the future. FERC is requiring PG&E to file its final application to “decommission” the PVP by January 2025. Based on PG&E’s discussions with parties interested in the Eel and Russian Rivers, PG&E may or may not apply to completely decommission the PVP and its facilities; may seek to transfer some portion of the PVP facilities to enable at least some continued imports to the Russian River watershed; or may propose some other course of action to FERC.

The effects on Russian River water sources and water rights could be as follows:

- **Natural flows and riparian rights.** Changes at the PVP clearly would not change natural precipitation in the Russian River watershed, so riparian rights still would have priority to whatever natural flows might exist. However, the flows actually physically available in the river could be much lower, particularly in the upper Russian River.
- **Appropriative rights and PVP imports.** To the extent that PVP imports continue to exist, Sonoma Water and RRFC would continue to bypass them to appropriators with 1905 to 1948 priorities during their season of use, largely the irrigation season. Those appropriators effectively would have priority to those flows over riparian right-holders.
- **Appropriative rights and stored PVP imports.** Sonoma Water and RRFC could continue to store, and later use, PVP imports that exceed downstream senior appropriators’ rights. Most storage of PVP imports generally would occur in the wetter months. Only water users who have contracts with Sonoma Water or RRFC, or who benefit from the 10,000-AFY reservation, would have legal access to this stored water. As the experience of the 2021-2022 drought years indicates, releases of stored water might be the primary source of water in the upper and lower Russian River during drier times.