

State Water Resources Control Board

Division of Water Rights

STAFF REPORT

RUSSIAN RIVER WATERSHED

Proposed Actions to be taken by
the Division of Water Rights
on Pending Water Right Applications
within the Russian River Watershed

August 15, 1997

Compliance New permits would contain specific measures to demonstrate compliance with the terms described above. Those measures would be developed on a case-by-case basis

5.3 Spring Frost Protection There are 11 applications within tributary watersheds requesting water rights for direct diversion for frost protection from March through May. Diversions of water for frost protection present a difficult problem. The period from March through May is a critical season for frost protection; however, maintaining adequate flow in the stream is also important for several critical life-stages of coho and steelhead. If all diverters simultaneously divert water for frost protection, flows could be lowered dramatically and impact fish. In order to evaluate the reasonableness of direct diversion for frost protection, Division staff have evaluated alternative methods that could be used to provide frost protection.

The SWRCB was faced with a similar situation on the Napa River. In that particular case, the SWRCB determined in 1972 that direct diversion for frost protection, when the river contained insufficient flow to supply all needs, represented an unreasonable method of diversion and use of water. The SWRCB restricted diversions from the Napa River for frost protection purposes, and required diverters to participate in a trial distribution program controlled by a watermaster. Sections 659 and 660 were added to the Regulations to define SWRCB policy for diversion of water from the Napa River for frost protection. In March 1974, legal action was brought in the Superior Court of Napa County by the SWRCB against diverters who were in violation of SWRCB policy. The lawsuit was ultimately settled by a stipulated judgement which required the diverters to participate in the trial distribution program.

A publication prepared by the Cooperative Extension at the University of California at Davis (Leaflet #2743) discusses frost protection measures for vineyards in Napa, Sonoma and Mendocino counties. The report presents comparative cost data for the two principal methods used for frost protection -- wind machines and sprinklers. The report states that the total annual costs of the two methods are:

	<u>Cost per acre</u>
. Wind machines and heaters	\$220 to 230
. Sprinklers	\$190 to 200

These data indicate that using wind machines, rather than directly diverting water from streams, is more expensive but is a reasonable, cost-effective, alternative method for providing frost protection. As described in the SWRCB memo on reasonableness "The overriding public interest may require an individual to incur reasonable additional expense in order to maximize beneficial uses of water."

The Cooperative Extension report also discusses the requirements for construction of small reservoirs to provide for winter time storage of water that could then be used to supply water for frost protection in the spring. The report states that a reservoir with a capacity of 22 af would provide sufficient capacity to provide frost protection for a 40 acre vineyard for a total of 60 hours of frost conditions. The total area required for the reservoir would depend on the topography of the

site and the depth of the reservoir. The report indicates that a 22 af reservoir would require about three acres of land.

The report also discusses the cost and practicality of using wells to provide water for frost protection.

As indicated above, there are reasonable, cost-effective alternative methods of providing frost protection, other than further direct diversions from the streams. As discussed in Attachment B, there are limited data available to define the flow regime in the spring to protect the fishery resources, however, providing adequate flow during this period is important for several life-stage of coho and steelhead. Consequently, staff concludes that new diversions for frost protection represent an unreasonable method of diversion and use of water. Accordingly, staff recommend that new diversions not be allowed after March 31, unless the applicant submits specific studies which demonstrate that further diversions in the spring will have no significant effect on coho and steelhead.

If applicants wish to construct off-stream storage reservoirs for storage of water for frost protection, rather than requesting a water right for direct diversion of water, it may be necessary for parties to submit a new application. Those new applications would have lower priorities than the pending applications. Where allowed, the Division will modify the applications for direct diversion and issue permits for off-stream storage reservoirs.

5.4 Projects on Main Stem Water is available for appropriation under D-1030 reservations for Mendocino and Sonoma Counties. Staff recommends the conditional approval of these pending applications, provided that existing protests can be resolved. Approval of the pending applications will have immeasurable impact on the flow in the main stem of the Russian River.

5.5 Municipal There is one pending application that requests a water right for existing diversion from the underflow of Austin Creek to supply 53.59 afa of water for municipal purposes in the town of Cazadero, which has about 280 permanent residents and 350 vacation residents. There is one other pending application that requests a water right for existing diversion from the underflow of Austin Creek to supply 10 afa for domestic purposes at 25 homes. There may be overriding public interest considerations that would preclude the SWRCB from canceling these applications. In both cases, the SWRCB is the "lead" agency and must prepare an environmental document. Staff will conduct an evaluation to determine whether there are feasible alternatives to the existing diversions and/or whether measures can be developed that would mitigate the potential impacts to fishery resources resulting from these diversions.

5.6 Domestic Several applications request the right to store 10 af or less of water for domestic purposes. Section 1228 et seq. of the Water Code provides for the issuance of Small Domestic Registration certificate for domestic use not exceeding direct diversion of 4,500 gpd or diversion by storage of 10 afa. For pending applications that meet these criteria, staff proposes to issue Small Domestic Registration certificates.