Russian River Frost Protection
Water Demand Management Plan

Submitted By: John H. Thomas

Date: 11-14-11

Inventory of frost diversion system(s)

(A) Name of the diverter - John H. Thomas
(B-1) Source of water used - main stem Russian River
(B-2) Location of diversion - 39.15233, -123.18293 - Heffern Ranch
(C) Diversion system description capacity - 50 HP electric pump
(D-1) Acres frost protected with irrigation - 0 1/2 (Excess water returned to river)
(D-2) Acres frost protected by other means - 0
(E-1) Rate of diversion - 12 5 g.p.m
(E-2) Hours of operation (ea. frost event) - 6 - 10
(E-3) Volume diverted (ea. frost event) - 14 g.f (6 HR) to 23 g.f (10 HR)

Stream stage monitoring program

(A-1) Number of gages - 2
(A-2) Gage type - USGS
(A-3) Location of stream gages - USGS 114 02080 - USGS 114 02500
(B) Stage that should be maintained at each gage to prevent stranding mortality

Whatever the minimum flow required by 1/10 at time of diversion

(C) Provisions for gage installation, calibration and maintenance

Gages already exist and are calibrated and maintained by the USGS

(D) Monitoring and recording intervals (not to exceed 15 min.)

15 minutes
Risk assessment

Guidelines: Based on the inventory and stream stage information described above, and information regarding the presence of habitat for salmonids, the governing body shall conduct a risk assessment that evaluates the potential for frost diversions to cause stranding mortality. The risk assessment shall be conducted in consultation with NMFS and DFG. The governing body is authorized to include its own expert scientists and engineers in the consultation, and request board staff to participate, when desired. The risk assessment shall be evaluated and updated annually.

My point of diversion is located on mainstem of Russian River, which flows are regulated, and my diversion is equipped with a NMFS and C.D.F.G. approved Fish Screen, so there is no risk associated with my operation. I will only divert when the flow in the River is in compliance with bypass flow terms of my C.D.F.G. 1000 (see attached) and Table 3 of the 2008 NMFS Final BO (see attached).

Corrective Actions

Guidelines: If the governing body determines that diversions for purposes of frost protection have the potential to cause stranding mortality, the governing body shall notify the diverter(s) of the potential risk. The governing body, in consultation with the diverser, shall develop a corrective action plan that will prevent stranding mortality. Corrective actions may include alternative methods for frost protection, best management practices, better coordination of diversions, construction of offstream storage facilities, real-time streamgage and diversion monitoring, or other alternative methods of diversion. Corrective actions also may include revisions to the number, location and type of stream stage monitoring gages, or to the stream stages considered necessary to prevent stranding mortality. In developing the corrective action plan, the governing body shall consider the relative water right priorities of the diversers and any time delay between groundwater diversions and a reduction in stream stage. The corrective action plan shall include a schedule of implementation. To the extent feasible, the corrective action plan shall include interim corrective actions if long-term corrective actions are anticipated to take over three years to fully implement. The diverser shall implement corrective actions in accordance with the corrective action plan, or cease diverting water for frost protection.

If River Flow get Below Bypass Flows as described in my 1600 Permit or Drop Faster then described in Table 3 of 2008 NMFS Final BO, I will stop diverting.