Russian River Frost Protection
Water Demand Management Plan

Submitted By:  John Thomas

Date:  11-14-11

Inventory of frost diversion system(s)

(A) Name of the diverter  Daniel Thomas

(B-1) Source of water used  Mainstem Russian River

(B-2) Location of diversion  39.09108, -123.17241, Alomar Ranch

(C) Diversion system description capacity  Electric 75 HP Pup  1500 gpm

(D-1) Acres frost protected with irrigation  20 acres

(D-2) Acres frost protected by other means  0

(E-1) Rate of diversion  1500 gpm

(E-2) Hours of operation (ea. frost event)  6-10 hours

(E-3) Volume diverted (ea. frost event)  1.65 ac (6 hr) to 2.75 ac (10 hr)

Stream stage monitoring program

(A-1) Number of gages  1

(A-2) Gage type  USGS

(A-3) Location of stream gages  Hopland - USGS 11462500

(B) Stage that should be maintained at each gage to prevent stranding mortality

\[ \text{whatever is minimum flow required by D1010 at time of diversion} \]

(C) Provisions for gage installation, calibration and maintenance

Gages already exist and are calibrated and maintained by 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.

I no longer divert from the River during Frost events. I installed a 11 a.f. Pond in 2010, since I am not diverting during a Frost events, the mainstem 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 recharge my pond during non-Frost events when the Flow in the River is in compliance with the Bypass Flow terms of my C.D.F.G. 1600 (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 diverters, 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 stream gage 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 diverters 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 diverters shall implement corrective actions in accordance with the corrective action plan, or cease diverting water for frost protection.

NMFS Final BO (see attached)

I no longer Direct Divert From the River during Frost events, the mainstem flows are regulated, and my diversion is equipped with a C.D.F.G. and NMFS approved Fish screen so there is no Risk associated with my operation. I will only recharge my pond during non-Frost events when the Flow in the River is in compliance with the Bypass Flow Terms of my C.D.F.G. 1600 (see attached) and Table 3 of the 2008 NMFS Final BO (see attached).