

Table 4: Shasta River Dissolved Oxygen and Temperature TMDL Implementation Actions

Source or Land Use Activity	Responsible Parties	Actions to Address Dissolved Oxygen and Water Temperature Impairment	Action Workplan
Range and Riparian Land Management (cont.)	<ul style="list-style-type: none"> • Shasta Valley Resource Conservation District (Shasta Valley RCD) • Shasta Coordinated Resource Management and Planning Committee (Shasta CRMP) 	<p>above to address site-specific conditions. This may include determining appropriate riparian widths for tree planting activities such that the appropriate width buffer is created to ensure effective stream shading and oxygen consuming material discharge elimination.</p> <p>Landowners shall submit annually to the Regional Water Board a written summary of all range and riparian management actions taken to achieve compliance with water quality standards, the TMDLs, and the NPS Policy, either individually or through the Shasta Valley RCD and its CRMP or through the CDFG coho ITP.</p> <p>RCD Actions: The Shasta Valley RCD and its CRMP should:</p> <ul style="list-style-type: none"> • Assist landowners in developing and implementing management practices that minimize, control and preferably prevent discharges of fine sediment, nutrients and other oxygen consuming materials, as well as elevated solar radiation loads from affecting waters of the Shasta River and tributaries. • Assist landowners in developing and implementing a monitoring program to evaluate and document implementation and effectiveness of the range and riparian management actions taken by the landowner. 	<p>Medium Term/Ongoing (FY 07/08 and beyond) -RWB staff will review annual compliance reports and take appropriate followup action, including progressive enforcement action for nonsubmittal of reports</p> <p>Ongoing – as we implement specific tasks in this workplan, we will be working with the RCD and the CRMP</p>

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Range and Riparian Land Management (cont.)		<p>Officer shall require, on a site specific as-needed basis, the appropriate responsible parties to develop, submit, and implement a ranch management plan designed to prevent discharges of fine sediment, nutrients and other oxygen consuming materials, as well as elevated solar radiation loads from affecting waters of the Shasta River and tributaries.</p> <ul style="list-style-type: none"> • The ranch management plan shall describe in detail: <ol style="list-style-type: none"> 1. Locations discharging and/or with the potential to discharge nutrients and other oxygen consuming materials, and elevated solar radiation loads to watercourses which are caused by livestock grazing or related activities. 2. How and when identified sites are to be controlled and monitored, and management practices that will be implemented to prevent and reduce future discharges of nutrient and other oxygen consuming materials, and elevated solar radiation loads to the Shasta River and its tributaries. <p>Group and/or individual ranch management plans shall be implemented upon review, comment, and approval by Regional Water Board staff and their Executive Officer for compliance with water quality standards, the TMDLs, and the NPS Policy.</p>	<p>-Implement progressive enforcement action on specific sites, as needed.</p> <p>Short/Medium Term (FY 06/07 and 07/08) -Regional Water Board staff are currently developing a Wetland and Riparian Protection Policy to be presented to the Board for decision in late 2007.</p>

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<p>(cont.)</p> <p>Tailwater Return Flows</p>	<ul style="list-style-type: none"> • CDFG • Regional Water Board Regional Water Board (cont.) 	<p>waters of the Shasta River and its tributaries.</p> <ul style="list-style-type: none"> • Implement the recommended actions specified in the Shasta Watershed Restoration Plan, Coho Recovery Strategy and the ITP (when approved). • Assist irrigators in developing and implementing a monitoring program to evaluate and document implementation and effectiveness of the tailwater management actions taken by the irrigators. <p>State Actions: CDFG will:</p> <ul style="list-style-type: none"> • Assist irrigators in developing and implementing management practices that minimize, control, and preferably prevent discharges of fine sediment, nutrients and other oxygen consuming materials, and elevated water temperatures from affecting waters of the Shasta River and its tributaries. • Administer the Coho Recovery Strategy and the ITP (when approved). <p>Regional Water Board will:</p> <ul style="list-style-type: none"> • Work with the Shasta Valley RCD and its CRMP to develop a monitoring program to evaluate and document implementation and effectiveness of the tailwater management actions taken by the irrigators. • Evaluate the effectiveness of tailwater management actions and develop recommendations 	<p>Ongoing – as we implement specific tasks in this workplan, we will be working with the DFG, including participating as a member of the Coho Recovery Team.</p> <p>-Short/Medium Term (FY 06/07 and 07/08) -Work cooperatively with RCD and CRMP to develop a monitoring program -Medium Term (FY 07/08 and 08/09) Evaluate effectiveness and develop recommendations to achieve compliance.</p>

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	<ul style="list-style-type: none"> <li data-bbox="436 748 541 773">• BLM <li data-bbox="436 1027 594 1081">• Regional Water Board 	<p data-bbox="657 719 831 743">BLM Actions:</p> <p data-bbox="657 751 1241 837">BLM shall implement best management grazing strategies that are detailed in a joint management agency document titled:</p> <ul style="list-style-type: none"> <li data-bbox="657 846 1276 932">• <i>Riparian Management, TR 1737-14, Grazing Management for Riparian-Wetland Areas, USDI-BLM, USDA-FS (1997).</i> <p data-bbox="657 967 1297 1021">See Appendix F of this Action Plan for some examples of these measures.</p> <p data-bbox="657 1057 1052 1081">Regional Water Board Actions:</p> <p data-bbox="657 1089 1304 1323">The Regional Water Board will work with the BLM to draft and finalize a Memorandum of Understanding (MOU). The MOU shall be drafted and ready for consideration by the appropriate decision-making body of the BLM within two years of EPA approval of the TMDL. The MOU shall include buffer width requirements and other management practices as detailed in Appendix F of this Action Plan.</p>	<p data-bbox="1346 386 1822 683">Medium/Long Term (09/10 and beyond) finalize MOU with USFS or, if unable to reach agreement, make recommendations to the Regional Board as to possible regulatory action(s) -Implement adopted action(s) and/or periodically assess compliance with and effectiveness of MOU measures; recommend revisions as necessary.</p> <p data-bbox="1346 781 1822 1203">Short/Medium Term (07/08 through 09/10) -RWB staff will work cooperatively with BLM to develop MOU Medium/Long Term (09/10 and beyond) finalize MOU with BLM or, if unable to reach agreement, make recommendations to the Regional Board as to possible regulatory action(s) -Implement adopted action(s) and/or periodically assess compliance with and effectiveness of MOU measures; recommend revisions as necessary.</p>

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Timber Harvest Activities on Non-Federal Lands (cont.)	<ul style="list-style-type: none"> Regional Water Board 	permitting and enforcement tools to regulate discharges from timber harvest activities in the Shasta River watershed, including, but not limited to: <ul style="list-style-type: none"> Participation in the CDF timber harvest review and approval process. Use of general or specific WDRs and waivers of WDRs if applicable, to regulate timber harvest activities on private lands in the Shasta River watershed. Timber harvest activities on private lands in the Shasta River watershed are not eligible for Categorical Waiver C included in the Categorical Waiver of <i>Waste Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region</i> (Order No. R1-2004-0016) simply through the adoption of this TMDL Action Plan. However, timber harvest activities on private lands in the Shasta River watershed may be eligible for Categorical Waivers A, B, D, E, and F, as appropriate. If the California Forest Practice Rules (Title 14 CCR Chapters 4, 4.5 and 10) are changed in a manner that reduces water quality protections, the Regional Water Board shall require plan submitters to maintain the level of water quality protection provided by the 2006 Forest Practice Rules. 	Short Term (06/07) -Notify CDF and private parties with current THPs as to the requirements under the Shasta TMDL -Meet with Timber Division staff to develop common understanding of TMDL results and applications, and to transfer information and tools developed during the TMDL process. Short/Mid Term (06/07 and beyond) -participate with Timber staff in HCP process(es) Mid/Long Term (07/08 and beyond) -Periodically meet with Timber division staff to discuss TMDL implementation on timber lands and fine tune efforts as necessary.

