

**Table 5.10  
Comparison of the Coho Recovery Strategy, Incidental Take Permit, Strategic Action Plan, and TMDL Action Plan<sup>1</sup>**

| <b>Topic</b>                  | <b>Coho Recovery Strategy's Recovery Recommendations</b>  | <b>Incidental Take Permit Application's Avoidance, Minimization, and Mitigation Measures</b>   | <b>Strategic Action Plan's Strategic Actions</b>  | <b>TMDL Action Plan's Implementation Actions</b>   |
|-------------------------------|---|--|---|--|
| Players                       | <ul style="list-style-type: none"> <li>California Department of Fish and Game (CDFG).</li> </ul>  | <ul style="list-style-type: none"> <li>Siskiyou Resource Conservation District (SRCD).</li> <li>California Department of Fish and Game (CDFG).</li> <li>Sub-permittees (primarily landowners in the Scott River watershed conducting water diversion and/or livestock management activities).</li> </ul>   | <ul style="list-style-type: none"> <li>Scott River Watershed Council (SRWC).</li> </ul>   | <ul style="list-style-type: none"> <li>The North Coast Regional Water Quality Control Board (RWB).</li> <li>Various responsible parties in the Scott River watershed.</li> </ul> |
| In-stream Habitat Improvement | <ul style="list-style-type: none"> <li>Improve spawning gravel quantity and quality.</li> <li>Identify methods for increasing habitat complexity and appropriate locations for instream habitat structures.</li> <li>Evaluate the use of beaver ponds and other efforts.</li> <li>Implement projects that improve stream geomorphology in conjunction with system-wide stream channel improvement.</li> </ul> | <ul style="list-style-type: none"> <li>The SRCD shall identify, design, and install spawning area enhancement structures in areas where spawning gravels are not plentiful.</li> <li>The SRCD shall install 20 in-stream structures, such as large woody debris and boulder structures to improve pools and cover.</li> </ul>  | <ul style="list-style-type: none"> <li>Evaluate the relationship of riparian conditions to fish habitat.</li> <li>Evaluate the geomorphology of the mainstem Scott River to identify potential restoration projects.</li> <li>Evaluate locations where the channel can connect to floodplain without negatively impacting existing land uses.</li> <li>Establish artificial beaver dams where appropriate.</li> </ul> |  |
| Fish Rescue                   | <ul style="list-style-type: none"> <li>Several actions, including evaluating fish rescue program.</li> </ul>  | <ul style="list-style-type: none"> <li>The sub-permittee shall provide reasonable access to CDFG for fish rescue operations.</li> </ul>  | <ul style="list-style-type: none"> <li>Evaluate results and monitor success of fish rescue program.</li> </ul>  |  |
| Fish Passage                  | <ul style="list-style-type: none"> <li>Several actions, including investigating opportunities to construct low-flow channels through alluvial fans to improve fish passage.</li> </ul>  | <ul style="list-style-type: none"> <li>The sub-permittee shall modify or replace diversion structures to allow for fish passage.</li> <li>The SRCD shall modify or replace at least 5 diversion structures per year (35 – 40 existing structures currently impede fish passage).</li> <li>The SRCD shall install a fish ladder at the Scott Valley Irrigation District diversion head to provide for juvenile coho passage.</li> <li>The SRCD shall install a boulder weir and improved head works at Farmers Ditch.</li> <li>The SRCD shall develop a project to provide fish passage over an existing pond on Rail Creek.</li> </ul> | <ul style="list-style-type: none"> <li>Identify existing fish passage structures and their locations.</li> <li>Evaluate success of fish passage structures.</li> <li>Perform barrier inventories of each stream with anadromous habitat.</li> </ul>   |  |
| Fish Screens                  | <ul style="list-style-type: none"> <li>Several actions, including screening all diversions in the known and potential range of coho salmon.</li> </ul>  | <ul style="list-style-type: none"> <li>The sub-permittee shall fit each water diversion structure with an appropriate fish screen.</li> <li>The sub-permittee shall use and maintain fish screens.</li> </ul>  | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>  |  |
| Other Fishery Issues          | <ul style="list-style-type: none"> <li>Several actions, including coho salmon population monitoring and assessment.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>  |  |

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|-----------------------------|--|---|--|--|
| Water Use & In-stream Flow  | <ul style="list-style-type: none"> <li>• Determine unused diversion rights and approach those diverters about providing flows for instream use without impacting the water rights of others.</li> <li>• Seek funding to conduct studies on flow-habitat relationships.</li> <li>• Provide process for the donation, selling, or leasing of water or water rights for in-stream flow.</li> <li>• Ask the SRWC to develop a Dry Year Water Plan.</li> <li>• Add additional oversight to verify water use and better manage water in watermaster service areas.</li> <li>• Support the Scott River Water Trust.</li> <li>• Prepare a comprehensive study to determine current status of groundwater in the Scott Valley and its relationship to surface flows.</li> <li>• Study the correlation of stream flow with other parameters to closely predict weekly flow rates (cfs).</li> <li>• Prior to groundwater study completion, recommend County establish process for developing groundwater management plans.</li> <li>• Several other actions.</li> </ul> | <ul style="list-style-type: none"> <li>• The sub-permittee shall install head gates and/or devices to measure/control diverted water.</li> <li>• The SRCD shall install at least 5 head gates and/or devices to measure/control diverted water per year (40 active diversions are currently in need of such structures).</li> <li>• The sub-permittee shall adhere to water rights.</li> <li>• The SRCD shall develop a water diversion verification method (e.g., watermaster service).</li> <li>• The SRCD has requested the permit include a condition that any measure specified in the permit be modified so as to eliminate any significant risk of a sub-permittee losing a portion or all of their water right if such a risk should exist.</li> <li>• In French and lower Shackelford creeks, the sub-permittee shall make diverted water usually used for agricultural purposes available for in-stream flow if connectivity with the Scott River is about to be broken prior to June 15. The SRCD shall pay the sub-permittee for the otherwise diverted water that is used for in-stream flow.</li> <li>• The SRCD shall develop the necessary legal steps and funding sources to allow for payments to sub-permittees for the otherwise diverted water that is used for in-stream flow.</li> <li>• The SRCD shall work with CDFG and water users to develop an water-saving solution to Fay Ditch, with saved water going to in-stream flow.</li> <li>• The RCD shall develop and implement a contingency plan for dry and critically dry water years.</li> <li>• The SRCD shall work with sub-permittees diverting water for livestock to minimize the amount of water diverted.</li> <li>• The SRCD shall install an average of 3 livestock water systems per year that use groundwater instead of surface water, with saved water going to in-stream flow.</li> </ul> | <ul style="list-style-type: none"> <li>• Working on the development of a groundwater study.</li> <li>• Evaluate the ground and surface water recharge effects of irrigation ditches.</li> <li>• Evaluate potential domestic/urban water use.</li> <li>• Investigate feasibility and effectiveness of various water recharge methods.</li> <li>• Investigate water storage opportunities.</li> <li>• Where feasible, install systems that reuse tail or end water or percolate it through the ground to cool it.</li> <li>• Encourage awareness that water use should not exceed adjudicated amounts.</li> <li>• Facilitate compliance with water rights.</li> <li>• Investigate the possibility of temporarily dedicating water for in-stream flow during emergency situations.</li> <li>• Identify products/goods which are less water intensive, develop handbook, and work with landowners to promote use of products.</li> <li>• Develop a manual to educate users about potential water conservation practices.</li> <li>• Investigate opportunities for upland vegetation management in the watershed to enhance water supply and timing.</li> </ul> | <ul style="list-style-type: none"> <li>• The RWB encourages water users to develop and implement water conservation practices.</li> <li>• The RWB requests the County of Siskiyou to study the connection between groundwater and surface water, the impacts of groundwater and surface water use on beneficial uses, and the impacts of groundwater levels on the health of riparian vegetation.</li> <li>• Should the County determine that it is able to commit to conducting the study, the County shall develop a study plan within 1 year of the date the TMDL Action Plan is approved.</li> </ul> |
| Riparian Fencing & Planting | <ul style="list-style-type: none"> <li>• Encourage riparian restoration and projects using locally native vegetation.</li> <li>• Continue riparian easement programs.</li> <li>• Educate non-agricultural landowners on the importance of not removing riparian vegetation.</li> <li>• Promote and encourage protection of riparian zones through fencing and other measures.</li> </ul>   | <ul style="list-style-type: none"> <li>• The sub-permittee shall install riparian fencing within a schedule specified by the SRCD.</li> <li>• The sub-permittee shall allow riparian fencing and planting to occur on their property.</li> <li>• The SRCD shall develop a riparian planting program.</li> <li>• The SRCD shall prioritize riparian fencing and planting activities.</li> </ul>  | <ul style="list-style-type: none"> <li>• Evaluate riparian planting projects and make recommendations to improve the program.</li> <li>• Identify, prioritize, and seek funding for riparian restoration opportunities.</li> <li>• Identify appropriate incentives for improving stream protection by working with agricultural users.</li> <li>• Develop a program for re-vegetating riparian areas in the residential dominated foothills.</li> </ul>  | <ul style="list-style-type: none"> <li>• The RWB encourages the preservation and restoration of vegetation that provides shade to a water body.</li> <li>• The RWB shall develop and take appropriate permitting and enforcement actions to address the removal and suppression of vegetation that provides shade to a water body.</li> </ul>  |
| Other Temperature Issues    | <ul style="list-style-type: none"> <li>• Identify location, timing, frequency, and duration of thermal barriers to migration for adult and juvenile salmon.</li> </ul>   |   | <ul style="list-style-type: none"> <li>• Identify and remedy conditions that contribute to high water temperatures.</li> <li>• Identify locations of thermal refugia.</li> <li>• Identify thermal barriers to migration.</li> <li>• Conduct riparian inventories.</li> <li>• Recommend enhancements to expand thermal refugia.</li> <li>• Additional actions.</li> </ul>   | <ul style="list-style-type: none"> <li>• See actions listed under the Riparian Fencing and Planting category.</li> </ul>   |

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|--|--|--|--|--|
| Grazing Activities                             | <ul style="list-style-type: none"> <li>Recommend to County to develop agricultural land use policies addressing coho salmon recovery actions, ideas, and protections.</li> </ul>   | <ul style="list-style-type: none"> <li>The sub-permittee shall ensure there is no intentional grazing of livestock within the bed, bank, or channel of the water bodies within the Scott River watershed without a grazing management plan approved and monitored by CDFG.</li> </ul>  | <ul style="list-style-type: none"> <li>Develop an information handbook and work with livestock managers on timing and movement of grazers to minimize stream impacts.</li> </ul>   | <ul style="list-style-type: none"> <li>The RWB encourages grazing-caused sediment and temperature prevention, minimization, and control.</li> <li>The RWB's Executive Officer shall require Grazing and Riparian Management Plans on an as-needed, site-specific basis.</li> <li>The RWB shall regulate grazing-caused sediment waste discharges and elevated water temperatures through appropriate permitting and enforcement actions.</li> <li>The RWB shall work with the USFS and the BLM to develop MOUs to address sediment waste discharges and elevated water temperatures from grazing activities or the RWB shall take appropriate permitting and enforcement actions.</li> </ul> |
| Roads & Other Sediment Waste Discharge Sources | <ul style="list-style-type: none"> <li>Develop a sediment budget.</li> <li>Design, secure funding, and implement projects.</li> <li>Identify, quantify, and remedy sources of fine sediment.</li> <li>Where agricultural roads have a potential effect on coho salmon, conduct inventory, implement remediation actions, and monitor effectiveness.</li> </ul> | <ul style="list-style-type: none"> <li>From November 1 to April 15, the sub-permittee shall cross flowing streams only at prepared crossing sites with livestock and vehicles. These crossings shall meet specific criteria (see the permit application for details).</li> <li>From November 1 to April 15, for the mainstem Scott River upstream of Young's Point Dam, including the East Fork Scott River, the sub-permittee shall cross flowing streams with livestock and vehicles only when redds are found to not be present.</li> </ul> | <ul style="list-style-type: none"> <li>Educate road users about road-related erosion problems and remedies.</li> <li>Identify and correct existing road-related drainage and erosion problems.</li> <li>Support the development of programs for continuous year-round maintenance of roads and bare slopes.</li> </ul> | <ul style="list-style-type: none"> <li>The RWB encourages road-caused sediment prevention, minimization, and control.</li> <li>The RWB's Executive Officer shall require Erosion Control Plans and Monitoring Plans on an as-needed, site-specific basis.</li> <li>The RWB shall regulate road-caused sediment waste discharges through appropriate permitting and enforcement actions.</li> <li>The RWB shall work with the County to develop a MOU to address county roads.</li> <li>The RWB encourages the County to develop a grading ordinance.</li> <li>The RWB shall evaluate Caltrans' state-wide Storm Water Program.</li> </ul>  |
| Timber Activities                              |  |  |  | <ul style="list-style-type: none"> <li>The RWB shall regulate timber-caused sediment waste discharges and elevated water temperatures through existing appropriate permitting and enforcement tools, including the general waste discharge requirements (WDRs) and the categorical waiver of WDRs.</li> <li>The RWB shall work with Habitat Conservation Plan holders to develop ownership-wide WDRs.</li> <li>The RWB shall work with the USFS and the BLM to develop MOUs to address sediment waste discharges and elevated water temperatures from timber activities or the RWB shall take appropriate permitting and enforcement actions.</li> </ul>                                     |
| Flood Control & Bank Stabilization             | <ul style="list-style-type: none"> <li>Identify and assess effects of flood control levees.</li> </ul>   |  |  | <ul style="list-style-type: none"> <li>The RWB encourages the planting and restoration of stream banks on and around existing flood control structures.</li> <li>The RWB shall use existing regulatory tools (e.g., 401 Water Quality Certifications) to ensure that flood control and bank stabilization activities minimize the removal and suppression of vegetation that provides shade to a water body.</li> </ul>  |
| Dredge Mining & Tailings                       | <ul style="list-style-type: none"> <li>Initiate study for tailing rehabilitation and water storage.</li> <li>Restore the Scott River flood plain in the Callahan Dredge Tailings reach.</li> </ul>   |  |  | <ul style="list-style-type: none"> <li>The RWB shall review laws and regulations relating to suction dredge mining and investigate the impact of suction dredge mining activities on sediment and temperature loads.</li> </ul>  |
| Cooperative Efforts                            | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>   | <ul style="list-style-type: none"> <li>The RWB shall work cooperatively with the SRCD, the Scott River Watershed Council, the Natural Resources Conservation Service, UC Cooperative Extension, and the CDFG.</li> </ul>   |
| Outreach & Education                           | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>   |  |
| Fire Issues                                    |  |  | <ul style="list-style-type: none"> <li>Several actions.</li> </ul>   |  |

<sup>1</sup> The recommendations, measures, and actions listed in this table are (1) summarized and (2) are the recommendations, measures, and/or actions that are most directly applicable to sediment and temperatures issues in the Scott River watershed. For more detail, please refer to the document from which the recommendations, measures, and/or actions are taken.