North Fork Mokelumne River Planning Unit Fish, Plant, and Wildlife Habitat

Potential Measure:

• Conduct surveys of lands outside the FERC boundary to identify biological resources and enable their protection.

Though many biological resource studies were conducted for the Mokelumne Project FERC relicensing, these studies likely focused only on resources within the FERC boundary and did not include the entire planning unit. Therefore, the Stewardship Council recommends conducting surveys outside the FERC boundary to identify biological resources and enable their protection. Information obtained from recommended surveys would further inform and guide restoration, habitat enhancement, or timber management opportunities in this area.

Potential Measure:

• Develop a wildlife and habitat management plan for the planning unit.

The Stewardship Council recommends using biological resource survey data to create a wildlife and habitat management plan. The planning unit and adjacent areas contain potential habitat for several special status species including valley elderberry longhorn beetle, northwestern pond turtle, American peregrine falcon, Pacific fisher, foothill yellow-legged frog, California spotted owl, Pleasant Valley mariposa lily, and Stebbins's lomatium. Tiger Creek contains considerable trout habitat and has a high potential for natural trout production. Recommended surveys may also reveal additional special status plants and wildlife.

Once recommended surveys are completed, potential habitat enhancement and restoration opportunities can be identified and developed into a comprehensive plan describing goals and objectives for habitat and species, as well as measures to enhance and protect habitat for both plant and wildlife species. The plan would emphasize continuity of management with adjacent USFS spotted owl Protected Activity Centers (PACs) and deer summer range habitat connectivity. Resident Columbian black-tailed deer and wintering California mule deer of the Salt Springs herd are found by Tiger Creek Regulator Reservoir. Spotted owl PACs are located primarily by Tiger Creek and along the North Fork Mokelumne River by Camp Creek. Identifying and protecting late successional stands for the purpose of habitat enhancement for the spotted owl would be one component of providing continuity with adjacent management. Monitoring of species and/or habitats would also be a component of the plan. The wildlife and habitat management plan should be developed in conjunction with the rangeland, noxious weed, forest management, and fuels management plans. Recommended habitat protection measures would also generally protect cultural resources.

Potential Measure:

• Develop a noxious weed management plan for areas not included in the FERC-mandated Noxious Weed Plan.

Preparation and implementation of a Noxious Weed Plan was mandated as part of the Mokelumne Project FERC License Order in the project area. This plan was prepared in 2002 and approved by Eldorado National Forest. The noxious weed survey area included USFS land inside

the FERC boundary as well as adjacent planning unit lands. The area south of Tiger Creek Powerhouse was not included in this plan. Baseline studies as well as the first treatment applications were carried out within the planning unit from 2004 to 2005. The Stewardship Council recommends preparation and implementation of a noxious weed management plan for areas of the planning unit not covered by the FERC license required Noxious Weed Plan. This measure is recommended to eradicate existing populations of noxious weeds where possible and implement preventative measures to minimize the spread of weeds in the future. This plan would also provide for more consistent management of noxious weeds with adjacent management and should be coordinated with PG&E and the USFS. This plan should be developed in conjunction with the fuels, forest, rangeland, and wildlife and habitat management plans.

Potential Measure:

• Support the Mokelumne Ecological Resource Committee and Eldorado National Forest to continue to enhance aquatic habitat in East and West Panther Creeks.

The FERC License Order mandated the removal of East and West Panther Creek diversion dams to restore natural fish passage conditions, bedload transport, and stream channel and riparian habitat. The diversion dam facilities have been entirely removed from West Panther Creek and partially removed from East Panther Creek. The dams are being removed to benefit aquatic species in these creeks as well as amphibian populations by restoring the creeks to natural, unimpaired flow. The Stewardship Council recommends supporting the Mokelumne Ecological Resource Committee that was established during FERC Project relicensing, as well as the Eldorado National Forest, to continue to enhance aquatic habitat in East and West Panther Creeks.

Potential Measure:

• Support future Upper Mokelumne River Watershed Authority efforts to preserve water quality and identify protection and improvement projects that are most critical.

The Stewardship Council also recommends supporting future Upper Mokelumne River Watershed Authority (UMRWA) efforts to preserving water quality, water supply, and the environment in the Upper Mokelumne River Watershed. The UMRWA Project developed a water quality database to establish a baseline for a watershed water quality assessment of the Upper Mokelumne River and identified management measures for agencies to implement to maintain and improve source water quality in the watershed.

Potential Measure:

• Restrict OHV use from Tiger Creek.

The Stewardship Council recommends that informal OHV access into Tiger Creek be restricted to protect riparian and aquatic habitat, as well as water quality. There is one specific area by a small bridge where OHVs can easily drive down into the creek. This activity should be restricted through the use of bouldering or other appropriate methods.

Sustainable Forestry

Potential Measures:

- Evaluate existing timber inventory data and supplement as appropriate.
- Develop a forest management plan for the planning unit to promote natural forest development and structural and physical diversity in forests for long-term ecological, economic, social, and cultural benefits.

The Stewardship Council recommends developing a forest management plan for the planning unit through the evaluation of existing forest inventory data and supplemental information, when appropriate. In addition to supporting natural forest development, the forest management plan would promote watershed management, supporting the enhancement of other BPVs over the long term. The forest management plan would be compatible with both current and recommended recreation uses, as well as areas of biological and cultural importance. Identifying and designating late successional stands for the purpose of habitat enhancement for spotted owl would also be incorporated into forest management practices. The forest management plan should be developed in conjunction with the rangeland, noxious weed, fuels, and wildlife and habitat management plans.

Potential Measure:

• Manage plantations to best mimic forests in the natural landscape.

Plantations were noted as being present south of Tiger Creek Regulator Reservoir in PG&E's September 2001 Timber Management Plan; however, the size and condition of plantations are unknown. The Stewardship Council recommends managing existing plantations to mimic forest in the natural landscape. The scale and layout of plantation blocks would be consistent with the patterns of forest stands found in the natural landscape. Trees would be selected that are suitable for the natural conditions of the site. Unless unsuitable based on regeneration potential, native species would be selected and exotic species used only minimally and only when determined to present no adverse ecological impacts. Management of plantations to mimic forests in the natural landscape would be included within the forest management plan.

In areas where timber extraction is consistent with the forest management plan, timber harvesting techniques would be promoted that maintain mosaics of forest stands of different age, size, and rotation period. In addition to utilizing PG&E's uneven-age selection harvest system, harvesting practices and a monitoring program would be included to protect watercourses and lakes and promote the restoration and conservation of natural forests. Post-harvest, a monitoring plan would be developed to ensure that forest management and the proposed harvesting schedule would be consistent with the forest management plan, promoting natural forest development in perpetuity. For those portions of the planning unit currently managed as Salvage and Salvage/Stand Improvement prescriptions, snags and downed woody debris would be maintained in the planning unit when not deemed a safety, fire, or disease hazard as these are important components for wildlife habitat and forest regeneration.

Potential Measure:

• Assess the potential to develop a demonstration forest for sustainable forestry research and management.

In addition, the Stewardship Council also recommends assessing the potential for the development of a demonstration forest, to promote sustainable forest management and research. This demonstration forest would represent the mixed conifer forest type which exists by Tiger Creek Reservoir. The development of a demonstration forest would be consistent with the goals and objectives of the forest management plan for the planning unit.

Potential Measure:

• Develop a fuels management plan to ensure long-term forest health and reduce fuel loading and fire hazard throughout the planning unit.

Management of fuels is very important in reducing high fire risk in this planning unit, particularly at the wildland/urban interface by Lake Tabeaud. Therefore, the Stewardship Council recommends developing a fuels management plan for this planning unit. The plan would ensure long-term forest health and reduce fuel loading and fire hazard throughout the planning unit. Coordination with adjacent landowners and USFS management would promote an integrative approach to the forest, habitat, and recreation resources in this area. This plan should be developed in conjunction with the rangeland, noxious weed, forest, and wildlife and habitat management plans.

Open Space

Potential Measure:

 Apply permanent conservation easements to ensure a higher level of open space protection.

The Stewardship Council recommends preserving open space values through permanent conservation easements. Conservation easements would describe all prohibited uses throughout the planning unit to maintain open space values, including the level of uses allowed. Recommendations include only minor additions of recreation facilities and are not expected to decrease the scenic quality of the viewsheds.

Agricultural Uses

Potential Measures:

- Develop a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement.
- Develop a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, as well as specifies grazing practices that address soil and water conservation, erosion control, pest management, nutrient management, vegetation management, and habitat protection.

The area by Lake Tabeaud currently provides opportunities for existing livestock grazing (goat, horse, and cattle grazing are permitted). It is unknown if range assessments have been completed

for the planning unit and whether or not appropriate grazing practices are being used by the existing lessee. Therefore, the Stewardship Council recommends developing a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement. This report would help determine appropriate grazing practices, regime, and management. Once the recommended baseline conditions report is completed, the Stewardship Council recommends developing a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, and specifies grazing practices that may address topics including soil and water conservation, erosion control, pest management, nutrient management, vegetation management, habitat protection, and cultural resources management. This plan would ensure that grazing use within the planning unit meets Stewardship Council policy for agricultural uses on Watershed Lands. The rangeland management plan should be developed in conjunction with the noxious weed, forest, fuels, and wildlife and habitat management plans, as well as development of recommended recreation facilities within the planning unit to ensure consistent and complementary actions.

Potential Measure:

• Evaluate the potential for grazing opportunities within the planning unit, in coordination with adjacent BLM and USFS grazing allotments.

During development of the baseline conditions report and rangeland management plan, opportunities for grazing in coordination with adjacent allotments would also be evaluated. The Stewardship Council recommends evaluating the potential for grazing opportunities in coordination with adjacent grazing allotments. Both BLM and USFS grazing allotments are located adjacent to planning unit lands. If grazing is determined to be feasible at new locations within the planning unit, other than by Lake Tabeaud, the recommended rangeland management plan should include this additional grazing use.

Preservation of Historic Values

Potential Measures:

- Conduct surveys outside the FERC Project APE to identify cultural resources and enable their protection.
- Coordinate with Native American entities when conducting cultural resource measures.

It is likely that cultural resource surveys conducted during relicensing efforts were limited to the FERC Project Area of Potential Effects (APE), generally defined as all lands within the FERC boundary. Therefore, lands outside the APE were likely not surveyed. There is a high likelihood of cultural sites outside the APE; therefore, the Stewardship Council recommends conducting surveys outside the APE to identify cultural resources and enable their protection. Documentation of cultural sites should be coordinated with Native American entities.

Potential Measures:

- Develop a cultural resources management plan for areas not already included in the FERC mandated Heritage Resources Management Plan (HRMP).
- Coordinate with Native American entities when conducting cultural resource measures.

Although a Heritage Resources Management Plan (HRMP) is being developed as part of FERC relicensing, it will only include measures to avoid and mitigate impacts to resources within the APE. Assuming that recommended surveys identify additional cultural sites within the planning unit, the Stewardship Council recommends developing a cultural resources management plan for areas not included in the FERC license required HRMP to ensure that all cultural resources are provided adequate protection in the future. The plan would include appropriate measures for the identification, evaluation, and treatment of cultural resources (archaeological and historical), as well as traditional use areas. Treatment measures could include avoidance, specific protective measures (e.g., fencing), site monitoring, and methods to preserve, restore, or enhance cultural resource values through conservation easements, management agreements, or through public interpretation and education programs. Management of recreation uses (e.g., management of OHV use) would also protect cultural resources from damage. Development of the cultural resources management plan should be consistent with the FERC license required HRMP and should be coordinated with Native American entities.

Potential Measures:

- Manage adjacent parcels to complement USFS Mokelumne Archeological District management.
- Coordinate with Native American entities when conducting cultural resource measures.

The Stewardship Council also recommends managing parcels adjacent to USFS lands to complement the management of the USFS Mokelumne Archeological District in order to ensure protection of outstanding remarkable heritage resource values. It would need to be verified that local tribes are included as a part of planning efforts for the Mokelumne Archeological District. If they area not, appropriate tribes should be included in any cultural resources planning associated with management of the planning unit lands.

Outdoor Recreation

Potential Measure:

• Add a trail around Lake Tabeaud.

The potential exists to further enhance existing recreation and provide additional recreation opportunities, though opportunities are somewhat limited by the variety of existing facilities. Existing recreation opportunities would continue and several new and enhanced recreation opportunities are recommended. Measures to enhance the recreation experience along the North Fork Mokelumne River and at Lake Tabeaud include the addition of several new trails. One of the recommended trails would provide access around Lake Tabeaud. Since Lake Tabeaud is only about 10 miles from the City of Jackson, the trail would provide a recreation experience for the local community. The trail would be located sufficiently away from Lake Tabeaud to minimize erosion or other water quality concerns to this drinking water reservoir. Security concerns related to trespassing, prohibited uses, and inappropriate hours of use as well as fire concerns would be addressed through the installation of signage as well as fuels management practices (discussed in more detail below). Any trail segments that already exist around Lake Tabeaud would be incorporated into this trail where feasible. The trail would also provide opportunities for impressive spring wildflower viewing.

Potential Measure:

• Support any future efforts to restore the historic Standard Canal Trail.

The Stewardship Council also recommends supporting any future efforts to restore the historic Standard Canal Trail. This historic trail was once located along the Standard Canal, but has been closed to the public. Reopening the trail could provide additional hiking, equestrian, and/or biking opportunities, as well as interpretive opportunities within the planning unit; therefore, the Stewardship Council recommends supporting any future efforts by other entities to restore this trail. Prior to restoring the historic trail, an analysis would need to be conducted by the entity organizing this effort to determine the safety and feasibility of reopening this trail, as it could expose sensitive operational features and adjacent properties to potential vandalism as well as create difficult fire management conditions.

Potential Measure:

• Support future efforts to establish the Coast to Crest Trail if the trail crosses planning unit lands.

In addition, the Stewardship Council recommends supporting future efforts to establish the Coast to Crest Trail if the final alignment crosses planning unit lands. The trail will likely be sited on the ridge-top on the south side of the Mokelumne River, in which case it would not pass through the planning unit parcels. However, if the trail crosses planning unit lands, access easements to cross planning unit lands would be needed.

Potential Measure:

• Improve fishing access at Tiger Creek Reservoir.

The Stewardship Council recommends enhancing fishing access at Tiger Creek Reservoir. At present, only one-third of the Tiger Creek Reservoir shoreline is accessible to anglers; nonetheless, the reservoir receives considerable use. The shore of Tiger Creek Reservoir is very steep in most locations, making access difficult. The Stewardship Council recommends providing a fishing access either by the Tiger Creek whitewater put-in area or at another suitable location along Tiger Creek Reservoir, if one can be identified, to enhance fishing access opportunities.

Potential Measures:

- Enhance existing day use facilities at Electra.
- Add a permanent restroom at the Tiger Creek whitewater put-in.

In addition, the Stewardship Council recommends improving existing recreation facilities, including enhancement of the existing day use facilities by Electra. The day use area by Electra would benefit from some enhancements, including revegetating some of the many user-created trails to the beach, improved signage to the picnic area, vegetation management by barbeques, and repair of damaged picnic tables. The Stewardship Council also recommends adding a permanent restroom to the Tiger Creek whitewater put-in area where the portable restrooms have been vandalized/tipped in the past.

Potential Measure:

• Install interpretive signage about dam removals, the history of power, mining, timber harvesting, water conveyance, and traditional uses in the area.

The Stewardship Council also recommends installing interpretive signage or displays depicting the history of mining activities, timber harvesting, hydropower, water conveyance, recent dam removals, and traditional uses in the area. This measure would educate the public about some of the values that make the North Fork Mokelumne River special and enhance their enjoyment and appreciation of those values. The addition of interpretive features could encourage better stewardship of the area. Signage could be located at existing day use areas or along proposed trails.

Potential Measure:

• Assess the potential for youth program opportunities.

The existing recreation facilities provide an excellent opportunity to educate youth from nearby towns such as Jackson on a variety of topics within the planning unit, such as wildlife, cultural resources, and stream restoration. Therefore, the Stewardship Council recommends assessing the potential for youth program opportunities within the planning unit to educate youth on topics such as wildlife and botanical resources, including threatened and endangered species, cultural resources associated with the adjacent USFS Mokelumne Archaeological District, and the recent dam removals on East and West Panther Creeks and associated aquatic habitat enhancements. Youth program opportunities would educate students on the outstanding resources in their local area and hopefully encourage a sense of pride and protection of these resources.

Potential Measure:

• Identify and disclose unauthorized uses and develop strategies to address future management and/or eradication.

The Stewardship Council also recommends determining the magnitude of existing illegal uses in this planning unit including drug/methamphetamine labs, dumping, trespassing, illegal camping, and vandalism. The Stewardship Council will work with PG&E to identify and disclose unauthorized uses, and develop strategies to address future management and/or eradication of those uses during the development of the disposition packages in Volume III of the LCP.

This page intentionally left blank.