

Fall River Valley Planning Unit

Fish, Plant, and Wildlife Habitat

Potential Measure:

- *Conduct surveys of the planning unit to identify biological resources and enable their protection.*

Very little data are available within the planning unit regarding terrestrial and aquatic resources. Available information is likely outdated, particularly with regard to Shasta crayfish populations because signal crayfish, a competitor, continue to invade new areas. It also appears that most species monitoring that is related to the Pit 1 Project does not cover the Fall River area contained within this planning unit. No botanical information is available for the planning unit. However, habitats within the planning unit likely provide for a variety of species. Therefore, the Stewardship Council recommends conducting surveys of the planning unit to identify biological resources and provide needed information for future management decisions.

Potential Measure:

- *Support Spring Creek Shasta crayfish habitat restoration efforts.*

The biggest threat to the endangered Shasta crayfish, the only remaining species of crayfish native to California, is the invasion of their habitat by non-native crayfish species, primarily signal crayfish. Creeks and rivers in the planning unit provide habitat for Shasta crayfish. Upper Spring Creek contains the largest remaining population of Shasta crayfish.¹ Currently, the Shasta Crayfish Technical Review Committee, formed by the recent Pit 1 Project and Hat Creek Project License Orders, has proposed a signal crayfish barrier project at Spring Creek.² To promote habitat enhancement for an endangered species, the Stewardship Council recommends supporting the Spring Creek Shasta crayfish habitat restoration efforts by potentially providing access to the area for restoration efforts or accommodating other project-related needs that would enhance the recovery of the imperiled crayfish.

Potential Measure:

- *Develop a wildlife and habitat management plan for the planning unit in coordination with USFWS and surrounding landowners to address habitat enhancement and management, water access, and recurring signal crayfish surveys and removal.*

In addition to the Spring Creek subpopulation, Lava Creek has the largest nearly continuous expanse of Shasta crayfish habitat of any location. Spring Creek, Lava Creek, and the two Ivy Horr ponds are all surrounded by private lands with no formal agreement between PG&E and adjacent landowners regarding use of these lands. Private land use can directly affect the quality of habitat on planning unit lands. To both protect and enhance valuable habitat for the endangered Shasta crayfish, the Stewardship Council recommends developing a wildlife and habitat management plan for the planning unit after biological surveys are completed. This plan would be created in conjunction with the U.S. Fish and Wildlife Service (USFWS, as it would affect at least one listed species – Shasta crayfish), and with surrounding landowners (as their cooperation, support, and permission to gain site access would be necessary to protect habitat and species and perform habitat enhancements).

Once surveys are completed, potential habitat enhancements can be identified and developed into a comprehensive plan describing goals and objectives for habitat and species, as well as measures needed to enhance and protect habitat for both plant and wildlife species. Potential enhancements could include restoration of Shasta crayfish habitat in Lava Creek or protection of bald eagle nesting and perching tree areas. Monitoring of species and/or habitats would also be developed as a component of the plan. The plan could also formalize access to planning unit waters and include recurring signal crayfish surveys and removal efforts as an essential measure for protection of Shasta crayfish. Development of the wildlife and habitat management plan should be coordinated with the rangeland management, noxious weed, forest management, and fuels management plans.

Potential Measure:

- *Assess the need for muskrat control along the banks of the Fall River to improve bank stability.*

In recent years, the Fall River has experienced a high sediment load. Muskrat burrowing can cause bank erosion and breakdown, thereby contributing sediment into the river. Muskrats can also prey on Shasta crayfish. Due to known muskrat activity in the Fall River area, the Stewardship Council recommends assessing the need for muskrat control along the banks of the Fall River to improve bank stability and reduce potential erosion, sedimentation, and other possible detrimental impacts to Shasta crayfish. If muskrat control is found to be needed, it should be included within the wildlife and habitat management plan.

Potential Measure:

- *Remove the old grazing fence near the Fall River to improve movement of wildlife.*

The current grazing lessee has recently built a new fence around the Fall River shoreline to prevent cattle from grazing in the riparian area. However, remnants of the old fence are still standing in one area, and the Stewardship Council recommends removing this fence to improve movement of wildlife. Removal of the old fence should be included within the wildlife and habitat management plan.

Potential Measure:

- *Develop a noxious weed management plan for the planning unit.*

It is unknown if there are noxious weeds within the planning unit. Due to the presence of noxious weeds within the greater Fall River Valley area, there is potential for noxious weed infestations within the planning unit. Therefore, the Stewardship Council recommends developing a noxious weed management plan for the planning unit, which would include management of both terrestrial and aquatic weeds. Development of the noxious weed management plan should be coordinated with existing PG&E noxious weed efforts, and the wildlife and habitat management, rangeland management, fuels management, and forest 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 to maintain open space values, including the level of uses allowed. Recommendations include some recreation development, but are not expected to decrease the scenic quality of the viewsheds.

Outdoor Recreation

Potential Measure:

- *Assess the potential for youth program opportunities.*

The Fall River Valley Planning Unit is a prime area for education as it provides a primitive recreation experience and a variety of resources on-site, including forests, cultural resources, aquatic and terrestrial resources, grassland, and open space. Youth could learn forestry techniques, history of the Fall River area, wildlife habitat requirements, plant identification, wildlife tracking, low impact recreation techniques, and how to fly-fish, among a long list of potential activities. Therefore, the Stewardship Council recommends assessing the potential for youth program opportunities within the planning unit. The recommended parking and day use facilities (as described below) could serve youth programs by providing a site for meeting, boat launching, and gathering for program activities.

Potential Measure:

- *Develop a shoreline day use area along the Fall River.*

In general, the Fall River has very limited public use due to a lack of public facilities and access. The only public Fall River recreation site, the California Trout, Inc. (CalTrout) Fishing Access located downstream of the planning unit, contains parking but no day use facilities. Therefore, boaters on the Fall River currently do not have a place to get out of their boats for picnicking or to use the restroom. The general public has expressed an interest in additional day use access to the river. Thus, the Stewardship Council recommends developing a shoreline day use area on the northern edge of the Fall River lands.³ The shoreline day use area would provide a place for anglers to come ashore and relax along the river, a site for visitors to picnic and enjoy the river setting, and a place for wildlife viewing and birding.

Potential Measures:

- *Develop a small parking area just off McArthur Road for day use area visitors.*
- *Develop a trail from the day use area to the parking area.*

The Stewardship Council also recommends developing a small parking area for non boat-in visitors as well as a trail connecting the parking area to the day use area. Therefore, the day use area would function as both a boat-in and walk-in facility. Providing such a facility would allow more people the opportunity to see the spectacular Fall River, fish for trophy rainbow trout, view the abundance of wildlife that use the Fall River Valley, and enjoy the primitive setting and open space of the planning unit lands along the Fall River. Development of these recommended facilities would need to be coordinated with any on-site grazing lessees so as not to hinder grazing use of the planning unit. Additionally, prior to development of recreation facilities, impacts on other resources, such as habitat or cultural resources, should be evaluated.

Signage could also be developed at the day use area, including signage regarding special fishing regulations; however, information related to wildlife and cultural resources would be better

developed after recommended surveys are completed. Additionally, as facilities are recommended for the shoreline area, the recommended facilities should be included in an appendix (non-jurisdictional) to the existing Pit 1 Project Recreation Plan to ensure long-term management, maintenance, and monitoring of use of the recommended facilities.

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 planning unit currently contains one PG&E Timber Management Unit (TMU) that is managed for emergency salvage operations; however, there is no overall documented vision for this TMU. Therefore, 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 holistic watershed management, supporting the enhancement of other BPVs over the long term. As this is an area mostly managed under a salvage-only prescription, 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. Development of the forest management plan should be coordinated with development of the wildlife and habitat management, noxious weed management, rangeland management, and fuels management plans.

Potential Measure:

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

Due to the location of the planning unit near the towns of Dana and McArthur, presence of rural residential development nearby, and the potential for the accumulation of fuels, reduction of fuels within the planning unit is important. Therefore, the Stewardship Council recommends developing a fuels management plan for the planning unit to ensure long-term forest health and reduce fuel loading and fire hazard. Development of the fuels management plan should be coordinated with the wildlife and habitat management, noxious weed management, rangeland management, and forest management plans.

Agricultural Uses

Potential Measure:

- *Develop a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement.*

It is unknown if range assessments have been done for the planning unit and whether or not appropriate grazing practices are being used by the grazing lessee. Thus, 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.

Potential Measure:

- *Develop a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, and specifies grazing practices that address soil and water conservation, erosion control, pest management, nutrient management, vegetation management, and habitat protection.*

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.

To coordinate potential habitat and recreation enhancements with grazing uses, the rangeland management plan should be developed in conjunction with the wildlife and habitat management plan, noxious weed management plan, fuels management plan, forest management plan, and development of day use, trail, and parking facilities to ensure consistency and complementary measures.

Preservation of Historic Values

Potential Measures:

- *Conduct surveys of the planning unit to identify cultural resources and enable their protection.*
- *Conduct an ethnographic study of the planning unit to identify traditional use areas.*
- *Coordinate with Native American entities when conducting cultural resource measures.*

Most of the planning unit, apart from lands within the FERC boundary that are underwater, is not included within the Pit 1 Project Area of Potential Effects (APE). Therefore, it is likely that cultural resource surveys were not conducted on most of the planning unit during Pit 1 Project relicensing studies. It is unknown if the rest of the planning unit has been surveyed for cultural resources. Additionally, lands within this planning unit may have been associated with Fort Crook and may have been used by Native Americans. Therefore, the Stewardship Council recommends surveying the planning unit to identify cultural resources and enable their protection and conducting an ethnographic study of the planning unit to identify traditional use areas. Documentation of cultural sites and the ethnographic study should be coordinated with Native American entities.

Potential Measures:

- *Develop a cultural resources management plan for the planning unit.*
- *Coordinate with Native American entities when conducting cultural resource measures.*

Assuming that the recommended surveys and ethnographic study identify cultural sites and traditional use areas within the planning unit, the Stewardship Council recommends developing a cultural resources management plan for the planning unit to ensure that 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. Development of the cultural resources management plan should be consistent with the Pit 1 Project Historic Properties Management Plan (HPMP) and should be coordinated with Native American entities.

Endnotes

¹ The Recovery Plan for the Shasta crayfish states that exclusion of non-native signal crayfish from Spring Creek is a Priority 1 task, meaning that it is an action that must be taken to prevent extinction or irreversible decline of the species.

² Culvert replacement at the Spring Creek Road Bridge left cavities in culvert foundations that provide signal crayfish refuges and therefore make complete eradication of signal crayfish in Spring Creek impossible. The barrier project, called the Spring Creek Road Crossing Cavity-Filling Project, will fill the cavities and provide for non-native crayfish eradication surveys for the life of the Pit 1 Project License or until such surveys are determined to be no longer needed.

³ Crayfish are not believed to be in this section of the Fall River.