

4.6 Land Use

Affected Environment

Regional Setting

The Battle Creek watershed lies on the volcanic slopes of Mt. Lassen in southeastern Shasta and northeastern Tehama Counties. The Restoration Project area is located in southern Shasta and northern Tehama Counties on lands south of Shingletown and Highway 44, and north of Paynes Creek and Highway 36.

Tehama County

Much of the Restoration Project is located in Tehama County. In 2002, about 36% of the county's population lived within the incorporated cities of Red Bluff, Corning, and Tehama; the remaining 64% of the population lived in rural areas (California Department of Finance 2002). Tehama County is officially classified as rural because its population centers are defined as rural communities (areas with populations less than 20,000). Therefore, the portion of the Restoration Project located in Tehama County is rural.

Tehama County is crossed by both Highway 99 and Interstate 5 and is the site of urban and other nonagricultural development centers. Tehama County's residential areas center around Red Bluff, Bowman, Bend, Los Molinos, and Proberta. The major urban center in the county is Red Bluff. Town centers are located in the areas of Los Molinos, Tehama, and Lake California. Town centers share many of the same characteristics as urban centers. However, town centers are not incorporated areas and typically serve smaller populations. Rural service centers are located near Proberta, Gerber, and Dairyville. Rural communities are located in the areas of Bowman and Bend. Rural communities have few urban services and much lower population densities and provide access to the natural environment as a major element in daily life. Much of the remaining land outside the residential, urban, and rural areas is characterized as agricultural land.

The basic goal of the Tehama County General Plan (Tehama County Community Development Group 1983) is the resolution of the inherent conflict between agricultural and nonagricultural land uses. The General Plan contains policies designed to prevent the piecemeal conversion of agricultural land to other uses by directing urban growth to land with relatively low agricultural capability, including the residential areas, town centers, rural service centers, and rural communities mentioned above.

Shasta County

The northern portion of the Restoration Project is located in the rural areas of Shasta County. Shasta County includes the incorporated cities of Anderson, Shasta Lake, and Redding. According to the Shasta County General Plan, Shasta County has three urban centers around these three incorporated cities (Shasta County 1998). These urban areas function as the county's major employment and retail trade centers. The four town centers in the county are Cottonwood, Palo Cedro, Burney/Johnson Park, and Fall River Mills/McArthur. There are also 25 rural communities in Shasta County.

Based on information from the 2000 U.S. Census and the California Department of Finance, approximately 63% of the county's population lives in the three incorporated cities of Anderson, Shasta Lake, and Redding and the unincorporated community of Cottonwood (U.S. Census Bureau 2001a; California Department of Finance 2002). The northeastern portion of the county, which houses another 5.5% of the county's population, represents the region's major public and private investments in the facilities and services required by urban development.

County Land Uses

Outside the incorporated areas of Tehama and Shasta Counties, the two principal land uses are timber and agriculture. These land uses are discussed below.

Timber

Timber is a major industry in both Tehama and Shasta Counties. Timberland is highly valued for its economic contribution to revenue and employment and for its beneficial contributions to wildlife habitat, watershed protection, erosion control, open space, scenic amenities, and recreation. To protect timberland, Timber Preserve Zoning was established in the 1970s. See the discussion under "Regulatory Setting" below for more information on Timber Preserve Zoning.

Timber covers a substantial portion of Tehama County, with about 24% of the county devoted to commercial forestland (Tehama County Community Development Group 1983). Virtually all of the county's timber resources are protected from conversion to other uses and from potential adjacent land use conflicts through the use of Timber Preserve Zoning.

Slightly more than 50% of Shasta County is dedicated to commercial forest use. Similar to Tehama County, much of this timberland is protected through Timber Preserve Zoning.

Agriculture

Much of the unincorporated land in Tehama and Shasta Counties not used for timber production is agricultural land, which is defined as land and accompanying activities used for the production of crops and livestock. Cropland and grazing land are also considered major open space resources as working landscapes. Both counties participate in the Williamson Act and have established agricultural preserves to encourage long-term agricultural production. See the discussion under “Regulatory Setting” below for more information on the Williamson Act.

The preservation of agricultural resources is identified as an objective in both county general plans. Tehama County is characterized as an agricultural county where agriculture has historically been and will continue to be a major force in the county’s economic base. In 2000, the Farmlands Mapping and Monitoring Program of the California Department of Conservation identified approximately 950,800 acres of agricultural (including grazing) land in Tehama County as a whole. Conversion of agricultural lands to other uses is less common in Tehama County than in counties to the south. During the period from 1998 to 2000, approximately 382 acres of agricultural land was converted to “urban and built up land” and approximately 1,094 acres to “other land” under the Program’s land use categories. Urban and built up land consists of land occupied by structures with a building density of at least one unit to 1.5 acres or approximately six structures per 10 acres. The other land category consists of land that doesn’t meet the criteria for agricultural or urban land. (California Department of Conservation 2001).

In Shasta County, in addition to its economic contribution, the agricultural community is in large part responsible for the area’s rural character. Agricultural land is a major component of Shasta County’s resource land base and a major element in defining the quality of life available to its residents. Approximately 444,800 acres of land was in agricultural use (including grazing) within Shasta County in 2000 according to the Farmland Mapping and Monitoring Program. Similar to Tehama County, conversion of agricultural land to other uses is relatively rare. During the period from 1998 to 2000, approximately 242 acres of agricultural land was converted to urban uses and approximately 504 acres was converted to “other land,” as identified under the Program’s land use categories (California Department of Conservation 2000). The conversion to other land was primarily due to new ranchettes on the Tuscan Buttes NE and Shingletown quadrangles (California Department of Conservation 2000). The modest size of these conversions indicates that agricultural land uses continue to predominate in both counties.

Land within the Restoration Project Area

Most of the land within the Restoration Project area, in both counties, is private land zoned for agriculture (including grazing). In Tehama County there is also one 63-acre area zoned as NR (natural resources and recreation) and one area as

TPZ (timber preserve zone) (Halpin pers. comm.). Similarly, Shasta County has one area designated as a TPZ and a small amount of residential zoning (Rogers pers. comm.). The general plans for each county do not have any new uses designated for any of the Restoration Project land. The area is primarily designated for agricultural/grazing usage (Halpin pers. comm.; Rogers pers. comm.).

Private Land

The majority of the land within the Restoration Project is privately owned and includes private timber and grazing land (see Figure 4.6-1). At present, a number of landowners manage their lands adjacent to the upland areas of Battle Creek primarily for agriculture or cattle grazing. Historically, some landowners have protected these upland areas from human disturbance by limiting access and by focusing land management on areas away from the water. However, other landowners have begun to supplement their incomes from agriculture and cattle ranching with the sale of trespass rights for hunting and fishing to allow the public access for these activities (McC Campbell pers. comm.).

Private land managed for agriculture or cattle grazing within the Restoration Project area includes one 47-acre parcel of farmland of state importance in Shasta County. Agricultural private land also encompasses about a dozen parcels of farmland of local importance between the two counties. The largest parcel of farmland of local importance comprises 294 acres; most other parcels are less than half that acreage (California Department of Conservation 2001). Additionally, the project area in both counties includes a fair number of Williamson Act lands (Halpin pers. comm.; Rogers pers. comm.)¹. There is no designated prime farmland within the project area boundaries. (California Department of Conservation 2001).

The Restoration Project area also includes two small Timber Preserve Zones—one in Shasta County and one in Tehama County (Halpin pers. comm.; Rogers pers. comm.).

Public Land

The U.S. Bureau of Land Management (BLM) administers small portions of public land within the Restoration Project (see Figure 4.6-1). Its Redding Resource Area encompasses approximately 247,500 acres of public land within Butte, Shasta, Siskiyou, Tehama, and Trinity Counties and includes the Restoration Project area. The Redding Resource Management Plan is the planning document that identifies the direction for the management of public

¹ In Tehama County, there are Williamson Act Preserves, used primarily for grazing, in 30N1W 3 and 30N1E 2, 3, 9, 10, 11, and 12 (Halpin pers. comm.). In Shasta County there are Williamson Act Preserves in 30N1W 13, 14, 15, 16, 21, 22, 23 and 30N1E 16, 17, 18, 19, and 20 (Rogers pers. comm.).

land within the Redding Resource Area (BLM 1993). To adequately address issues in this large geographic area, the Redding Resource Area was further broken into smaller areas referred to as management areas. The Restoration Project is located in the Sacramento River and Ishi Management Areas.

As discussed in the Redding Resource Management Plan, efforts are under way to convert some private land along the main stem of Battle Creek to publicly owned land. The portion of the Restoration Project below Manton Road and located in the Sacramento River Management Area would be managed for natural values, semiprimitive recreational opportunities, and the protection of archaeological resources (BLM 1993). See the discussion under “Cumulative Impacts” for more information.

Relevant resource and land use allocation objectives for the Ishi Management Area, which encompasses portions of the Restoration Project area, include:

- improving semiprimitive recreational opportunities,
- enhancing anadromous fisheries,
- maintaining and improving the quality and quantity of riparian vegetation,
- protecting existing wildlife habitat,
- maintaining the scenic quality of the area,
- managing the area as “Semi-Primitive Motorized,”
- limiting vehicles to designated roads and trails,
- closing the corridor to new livestock grazing permits, and
- acquiring available unimproved land within the corridor.

Throughout the Redding Resource Management Plan area, the demand for public land for outdoor recreational uses continues to increase in both intensity and diversity. In many places, public land provides the only readily accessible opportunity to pursue wildland recreational opportunities (BLM 1993). Because of the area’s remote nature and the abundance of privately owned land, public access to the Restoration Project is fairly limited. Public access is described further in Section 4.14, “Recreation.”

Local Communities

Manton, the only community located in proximity to the Restoration Project, is a rural community center that includes an elementary school serving approximately 70 students, a local store, a diner, and numerous cottage businesses, several with international clients (Paquin-Gilmore 1999). Vineyards and historically grown Manton apples, produced by several local growers, are significant crops in the Manton community. Some haying also occurs here and numerous ranchers raise cattle. Some ranchers have diversified to operate private hunting and fishing clubs on their properties, including deer hunting and catch-and-release fishing.

Oak woodland is also harvested for firewood, and harvesting of lava rocks has increased as another form of income for area landowners (Paquin-Gilmore 1999).

Regulatory Setting

The following laws, regulations, or policies relate to land use within the Restoration Project. Descriptions of these, if not described below, can be found in Chapter 5, “Consultation and Coordination.”

Timber Preserve Zoning

Timber Preserve Zoning was developed as a means to implement the Forest Taxation Reform Act of 1976 (Revenue and Tax Code §§38101-38908). The intent of Timber Preserve Zoning is not only to protect the integrity of timber resources but also to prevent timber harvesting operations from adversely affecting other land uses.

Williamson Act

The California Land Conservation Act of 1965 (Government Code §§51200-51295) (commonly known as the Williamson Act) established a voluntary tax incentive for preserving both agricultural and open space land. The act reduces property taxes in return for the guarantee that the property will remain in agriculture for not less than 10 years, thereby slowing the conversion of agricultural land. Under the act, property owners enter into 10-year contracts with their respective counties. The counties then place restrictions on the land in exchange for tax savings. The properties are taxed according to the income they are capable of generating from agriculture and other compatible uses, rather than being taxed on their full market values.

Farmland Protection Policy Act

Congress enacted the Farmland Protection Policy Act (FPPA) as a subtitle of the 1981 Farm Bill. The purpose of the law is to “minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses” (P.L. 97-98, Section 1539-1549; 7 U.S.C. 4201, et seq). The FPPA also stipulates that federal programs be compatible with state, local, and private efforts to protect farmland. For the purposes of the law, federal programs include construction projects—such as highways, airports, dams and federal buildings—sponsored or financed in whole or part by the federal government, and the management of federal lands. The U.S. Department of Agriculture's Natural Resources Conservation Service is charged with oversight of the FPPA.

The FPPA applies to federal projects that would convert farmland to nonagricultural uses. The Restoration Project will involve a variety of changes to the power facilities along the North and South Forks of Battle Creek, including the removal of dams, installation of fish screens and ladders, construction of water conveyances, and construction/improvement of access roads. None of these activities would affect or convert existing agricultural uses. Therefore, the FPPA does not apply to the Restoration Project.

Environmental Consequences

Summary

No significant land use impacts are associated with the No Action Alternative or the action alternatives. Most of the land in the Restoration Project would not be affected by implementation of the Restoration Project. Disturbance would be limited to areas associated with construction, modification, or removal activities, including stream beds and banks, short-term and long-term access roads, staging areas, and Hydroelectric Project dam site facilities, conveyances, and appurtenant facilities.

Impact Significance Criteria

According to Section 15065 and Appendix G of the State CEQA Guidelines, as well as other concerns in the Restoration Project area, impacts for this analysis would be considered significant if implementation of the Restoration Project would:

- Conflict with established land uses, including recreational, educational, religious, or scientific uses;
- Displace a large number of people;
- Conflict with proposed or approved development plans or adopted zoning; and
- Convert existing agricultural land to nonagricultural use or impair its agricultural productivity.

Impact Assessment

As applicable, the General Environmental Protection Measures listed in the introduction to this chapter shall be utilized for this resource.

No Action Alternative

The No Action Alternative would not impact land use. The No Action Alternative is not expected to conflict with general plans and established land uses, alter existing land uses, displace a large number of people, or convert agricultural land to nonagricultural land.

Five Dam Removal Alternative (Proposed Action)

Impact 4.6-1 Less than Significant—Conversion of lands disturbed by construction activities from open space to Restoration Project support would substantially conflict with existing land uses.

Because of the complexity of the Restoration Project, some lands, dispersed between and near construction sites, would be converted to uses that support the long-term operation and maintenance of the constructed and improved facilities. Although some of the lands disturbed by construction (e.g., staging areas) would be restored or revegetated to conditions approximating their preconstruction condition, others will be permanently converted to other uses, including:

- Access roads, which include improvements to intersections and turnout improvements from main roads, construction of new access roads, and improvements (blading and graveling) to existing access roads;
- Conveyances, which include overflow wasteways, bypass pipelines, chutes, stilling basins, tailrace connectors, channels, tunnels, sluiceway chutes, canals requiring excavation, backfilling, or realignment, and other water conveyances;
- Appurtenant facilities, which include screen boxes, channel and gate structures, sediment trap basins, and tailrace dikes, wasteways, and access ramps; and
- Dam site facilities, which include dams to be removed or improved with fish screens, fish ladders, and cofferdams.

Most of the lands permanently converted to these uses are remote and small and are being converted to passive uses consistent with surrounding agricultural, grazing, and open space uses. Because of the limited extent of land converted, the remote locations' dispersal across a wide area, and continuing access restrictions, this impact is considered to be less than significant. These widespread, small land use conversions would not conflict with established land uses, displace a large number of people, conflict with proposed or approved development plans or adopted zoning, provide access to previously inaccessible areas, result in timber harvesting on protected timberlands, convert protected timberlands to other land uses, convert existing agricultural lands to nonagricultural uses, or impair their agricultural productivity. Therefore, the Five Dam Removal Alternative would have a less-than-significant impact on land use.

No Dam Removal Alternative

Impact 4.6-2 Less than Significant—Conversion of lands disturbed by construction activities from open space to Restoration Project support would substantially conflict with existing land uses.

The No Dam Removal Alternative would involve the construction of new fish screens and fish ladders at six diversion dams (North Battle Creek Feeder, Eagle Canyon, Wildcat, South, Inskip, and Coleman Diversion Dams) and would not include the removal of any dams. Some lands, dispersed between and near construction sites, would be converted to uses that support the long-term operation and maintenance of the constructed and improved fish screens and fish ladders. Although some of the lands disturbed by construction (e.g., staging areas) would be restored or revegetated to conditions approximating their preconstruction condition, others would be permanently converted to other uses, including:

- access roads, which include improvements to intersections and turnout improvements from main roads, construction of new access roads, and improvements (blading and graveling) to existing access roads;
- water conveyances, which include chutes and weirs; and
- improved fish screens and fish ladders at the six dam sites.

Because it would affect a smaller area than the Five Dam Removal Alternative (i.e., no construction would occur at Soap Creek Feeder and Lower Ripley Creek Feeder under the No Dam Removal Alternative), the No Dam Removal Alternative would have less impact than the Restoration Project and, therefore, a less-than-significant impact to land use.

Six Dam Removal Alternative

Impact 4.6-3 Less than Significant—Conversion of lands disturbed by construction activities from open space to Restoration Project support would substantially conflict with existing land uses.

The Six Dam Removal Alternative would remove the Eagle Canyon Diversion Dam and its appurtenant facilities, in addition to the five diversion dams described in the Five Dam Removal Alternative (Wildcat, South, Soap Creek Feeder, Lower Ripley Creek Feeder, and Coleman Diversion Dams). Otherwise, its physical changes would be essentially the same as those described for the Five Dam Removal Alternative. Although some of the lands disturbed by construction (e.g., staging areas and areas over tunnels and pipelines) would be restored or revegetated to conditions approximating their preconstruction condition, others would be permanently converted to other uses, including:

- access roads, which include improvements to intersections and turnout improvements from main roads, construction of new access roads, and improvements (blading and graveling) to existing access roads;

- conveyances, which include overflow wasteways, bypass pipelines, chutes, stilling basins, tailrace connectors, channels, tunnels, sluiceway chutes, canals requiring excavation, backfilling, or realignment, and other water conveyances;
- appurtenant facilities, which include screen boxes, channel and gate structures, sediment trap basins, and tailrace dikes, wasteways, and access ramps; and
- dam site facilities, which include dams to be removed or improved with fish screens, fish ladders, and cofferdams.

Most of the lands permanently converted to these uses are remote and small and are being converted to passive uses consistent with surrounding agricultural, grazing, and open space uses. Because of the limited extent of land converted, the remote locations' dispersal across a wide area, and continuing access restrictions, this impact is considered to be less than significant. These widespread, small land use conversions would not conflict with established land uses, displace a large number of people, conflict with proposed or approved development plans or adopted zoning, provide access to previously inaccessible areas, result in timber harvesting on protected timberlands, convert protected timberlands to other land uses, convert existing agricultural lands to nonagricultural uses, or impair their agricultural productivity. Therefore, the Six Dam Removal Alternative would have a less-than-significant impact on land use.

Three Dam Removal Alternative

Impact 4.6-4 Less than Significant—Conversion of lands disturbed by construction activities from open space to Restoration Project support would substantially conflict with existing land uses.

The Three Dam Removal Alternative would remove Eagle Canyon, Wildcat, and Coleman Diversion Dams. In addition, the tailrace connection between the South Powerhouse and the Inskip Canal would be an open channel, rather than the full-flow tunnel proposed under the Five Dam Removal Alternative. Wildcat and Coleman Diversion Dams are also proposed for removal under the Five Dam Removal Alternative.

Under the Three Dam Removal Alternative, the South Diversion Dam would not be removed and a fish screen and ladder would be installed at this location. In addition, Soap Creek Feeder and Lower Ripley Creek Feeder would be retained, but no new fish screens and fish ladders would be installed. Accordingly, the construction impacts associated with removal of those dams and the changes to associated structures that are proposed under the Five Dam Removal Alternative would be avoided.

Although some of the lands disturbed by construction (e.g., staging areas and areas over tunnels and pipelines) would be restored or revegetated to conditions approximating their preconstruction condition, others will be permanently converted to other uses, including:

- access roads, which include improvements to intersections and turnout improvements from main roads, construction of new access roads, and improvements (blading and graveling) to existing access roads;
- conveyances, which include overflow wasteways, bypass pipelines, chutes, stilling basins, tailrace connectors, channels, tunnels, sluiceway chutes, canals requiring excavation, backfilling, or realignment, and other water conveyances;
- appurtenant facilities, which include screen boxes, channel and gate structures, sediment trap basins, and tailrace dikes, wasteways, and access ramps; and
- dam site facilities, which include dams to be removed or improved with fish screens, fish ladders, and cofferdams.

Land use impacts associated with the Three Dam Removal Alternative would be similar to those described for the Five Dam Removal Alternative, although less extensive. The Three Dam Removal Alternative would have less impact than the Restoration Project and, therefore, a less-than-significant impact to land use.

Cumulative Impacts

Cumulative land use impacts associated with the Proposed Action and past, present, or probable future projects (including those mentioned in Chapter 6) would not occur in the Battle Creek watershed because the Restoration Project is intended to remove dams, improve fish screens and ladders, and augment instream flows in North Fork and South Fork Battle Creek and some tributaries. Nothing in the Restoration Project is intended to change existing land uses in the Restoration Project or the surrounding lands. The Restoration Project would not impose any additional land use restrictions beyond limiting access to certain facilities for safety concerns and to restrict the opportunities for vandalism.

The Nature Conservancy (TNC) has established one conservation easement within the Battle Creek watershed and is negotiating with several other landowners about possibly acquiring others. In 1999, it purchased a conservation easement on the 36,000-acre Denny Ranch, which is located on both the north and south sides of Highway 36 about 7 miles northeast of the intersection of Highway 36 and Highway 99. The property will continue to be operated as a privately owned working cattle ranch, while its natural communities are permanently preserved from subdivision and development land uses. The Denny Ranch links protected BLM lands on its western borders with the Tehama National Wildlife Refuge to the east. In turn, the wildlife refuge adjoins Lassen National Forest and TNC's Dye Creek Preserve.

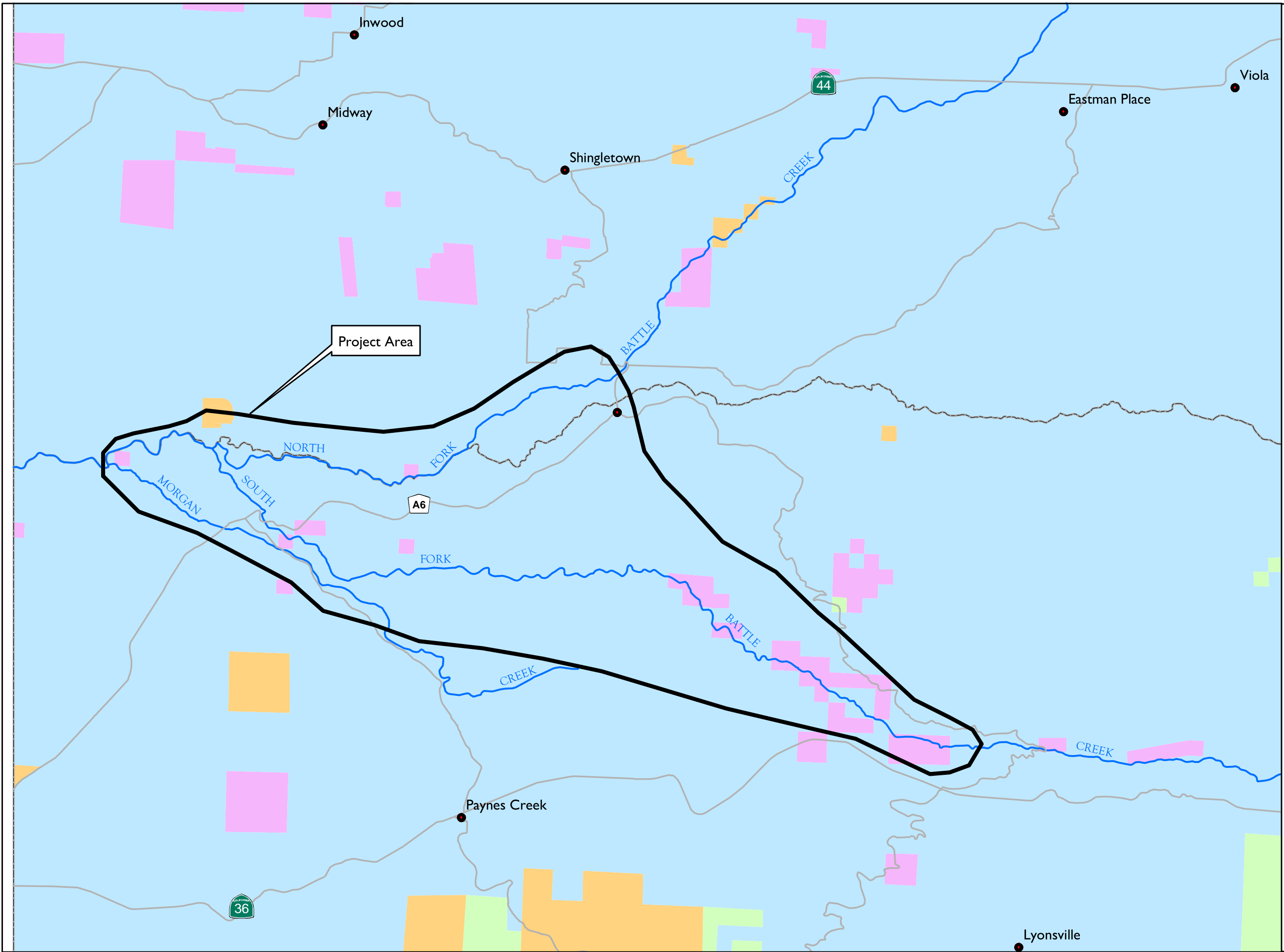
TNC believes that the next important step in protecting salmon and steelhead along Battle Creek is protecting the relatively pristine riparian habitat along the stream from alteration and preventing the loss or alteration of its cold spring water by well development. In this project, TNC, working in partnership with

the BCWC, plans to acquire conservation easement interests from willing landowners on resource-rich Battle Creek properties with the potential for future development. These easements will provide conservation protection of natural processes while maintaining the land in private agricultural use and ownership. It is intended that the terms of the easements, although they may vary slightly to fit a particular property, will help ensure protection of the riparian habitat, prevent excessive water extraction and use, and ensure connectivity of the stream to the surrounding land.

The BLM has also acquired conservation easements on two properties in lower Battle Creek including land along the mouth of the stream. The purpose of these easements, acquired in October 2000 on the Gover Ranch, is to conduct riparian restoration activities along Battle Creek and the Sacramento River and to maintain the agricultural nature of these properties. The BLM will be developing a conservation plan for these properties and anticipates implementing restoration activities during the next 15 to 20 years.

The USFWS and TNC have obtained a conservation easement on Digger Creek in Shasta and Tehama Counties. In late September 2001, the TNC acquired the 1,844-acre Wildcat Ranch, which has approximately 2 miles of frontage along North Fork Battle Creek (TNC 2002). The ranch is just downstream from the 990-acre Canyon Ranch, which TNC previously had protected with a conservation easement. TNC will hold Wildcat Ranch for about 2 years in order to carry out studies and land stewardship work. It then will place a conservation easement on the ranch and sell it to a private buyer (TNC 2002). TNC will hold and monitor the conservation easement to ensure compliance with its terms.



Discussions concerning the establishment of additional conservation easements associated with the Restoration Project are not explicitly stated as part of the Restoration Project as defined for this land use analysis. Should conservation easements be negotiated with landowners in the vicinity of the Restoration Project, these negotiations would be conducted on a willing landowner basis, independent of Restoration Project implementation unless included in private negotiations.



Land Ownership

Figure 4.6-1

Legend

-  Roads
-  Rivers and Streams

Ownership

Agency

-  Bureau of Land Management
-  US Forest Service
-  State Lands
-  Private Lands
-  County Boundaries

5,000 0 5,000 Feet

