CHAPTER 2. COVERED ACTIVITIES

2.1 INTRODUCTION

This chapter describes the permanent development projects and recurring maintenance activities within the Plan Area of the Butte Regional Conservation Plan (BRCP) for which the Permit Applicants (see Section 1.1, *Overview*) are seeking incidental take permit coverage from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the California Department of Fish and Wildlife (CDFW) in compliance with the federal Endangered Species Act (ESA) and the Natural Community Conservation Planning Act (NCCPA). These permanent development projects[1] and recurring maintenance activities are the *covered activities* for which incidental take authorization will be obtained. These covered activities could adversely affect covered species and natural communities, including incidental take of species (see Chapter 4, *Impact Assessment and Estimated Level of Take*). The BRCP also covers incidental take associated with activities on qualifying lands that are adjacent to BRCP conservation lands through neighboring landowner agreements (see Section 8.9, *Neighboring Landowner Assurances*, for a description of the neighboring landowner assurances process). The BRCP Conservation Strategy provides avoidance and minimization measures and mitigation for all adverse effects of these covered activities on covered species and covered natural communities (see Chapter 5, *Conservation Strategy*). An analysis of effects, including assumptions used in the analysis, of the covered activities described in this chapter is provided in Chapter 4, *Impact Assessment and Estimated Level of Take*.

Permanent development projects include well-defined actions that occur once in a specific location and permanently remove all existing habitat at the project site location. These include many types of land development projects, such as housing, commercial, retail and industrial development projects; transportation facility projects, pipeline, utility and wastewater management projects; and flood control and stormwater management projects. A complete description of the covered activities is presented in Section 2.2, *Covered Activities within UPAs*, through Section 2.5, *Covered Activities within Conservation Lands*.

Recurring maintenance activities are actions that occur repeatedly over time in the same location. Recurring maintenance activities result in temporary removal of existing habitat from the site location that reestablishes between maintenance intervals. An example of a recurring maintenance activity is periodically mowing vegetation from a roadside to maintain visibility and reduce fire hazard.

Covered activities described in Section 2.2.1, *Permanent Development Projects within UPAs* through Section 2.3.2, *Recurring Maintenance Activities outside UPAs* will be implemented by the California Department of Transportation (Caltrans) District 3, the Butte County Association

[1] The terms "projects" and "activities" are used interchangeably in this document in reference to various types of covered activities.

of Governments (BCAG), and the Local Agencies (see Section 1.1.1, *Background*) and private entities subject to the jurisdiction of the Local Agencies. Covered activities described in Section 2.4, *Covered Activities within Water and Irrigation Districts*, will be implemented by Western Canal Water District (WCWD), Biggs-West Gridley Water District, Butte Water District, and Richvale Irrigation District. Covered activities described in Section 2.5 are associated with implementation of the Conservation Strategy and will be implemented by BCAG as the Implementing Entity or by other entities through agreements with BCAG.

Sections 2.2 through 2.5 describe the following four groups of covered activities.

1. **Covered Activities Within Urban Permit Areas.** Covered activities that will be implemented in Urban Permit Areas (UPAs) are described in Section 2.2. UPAs are those mapped locations in the Plan Area within which the Local Agencies anticipate urban development will occur under their respective general plans. The 15 Plan Area UPAs are listed below and located as indicated in Figure 2–1, *BRCP Urban Permit Areas (UPA) and Conservation Acquisition Zones (CAZ)* (see separate file).

   - Nord UPA
   - Chico Wastewater Treatment Plant UPA
   - Gridley Wastewater Treatment Plan UPA
   - Neal Road Recycling and Waste Facility UPA
   - Honcut UPA
   - State Route 99 UPA
   - Nelson UPA
   - Richvale UPA
   - Gridley-Biggs UPA
   - Durham UPA
   - Bangor UPA
   - Oroville UPA
   - Chico UPA
   - Foothill Area UPA
   - Dayton UPA

2. **Covered Activities outside Urban Permit Areas.** This group includes all covered activities, described in Section 2.3, *Covered Activities outside UPAs*, that will be implemented in Plan Area locations outside of the UPAs, except for those that will be implemented on BRCP conservation lands (see Section 2.5) and those activities of irrigation and water districts (see Section 2.4). This category of covered activities primarily includes activities related to linear utilities and transportation construction projects, agricultural support services projects, and recurring maintenance activities.

3. **Covered Activities within Irrigation and Water Districts.** This group includes all covered activities implemented by the four participating districts within portions of their service areas that are located in the Plan Area. These service area boundaries overlap the UPA boundaries.[2] These covered activities are described in Section 2.4 and include recurring maintenance activities such as canal and ditch maintenance, and limited permanent development projects such as canal rerouting projects.

4. **Covered Activities within Conservation Lands.** This group includes conservation actions that will be implemented on BRCP conservation lands as described in Chapter 5, *Conservation Strategy*, and summarized in Section 2.5. These covered activities include actions to enhance, restore, and manage protected habitat, monitoring activities, and

[2] In Chapter 4footprint impacts of this category of covered activities are assessed for the portion of the service areas that are within and outside of the UPAs and are not reported by district service areas.

recurring maintenance activities, including maintaining conservation land infrastructure and other facilities present on conservation lands (e.g., access roads and fences). BRCP conservation lands may be located both within and outside of the UPAs.

The covered activities include the construction and maintenance of facilities and infrastructure, both public and private, that are consistent with local general plans and local, state, and federal laws. The covered activities are divided into two categories: 1) permanent development projects and 2) recurring maintenance activities involving maintenance of existing or new facilities that happens periodically over the duration of the permit. The reason for these two categories is that the impacts resulting from such activities and the conservation measures used to address such activities tend to differ based on the permanence or recurring nature of the activity.

Based on the four groups and two categories of covered activities, the description of covered activities in Sections 2.2 through 2.5 are organized as follows.

- Permanent development projects within UPAs
- Recurring maintenance activities within UPAs
- Permanent development projects outside UPAs
- Recurring maintenance activities outside UPAs
- Permanent development projects within districts
- Recurring maintenance activities within districts
- Covered activities within BRCP conservation lands

2.1.1 Implementation of Covered Activities

All parties seeking coverage for permanent development projects and recurring maintenance activities under the BRCP must obtain approval from the Permittee (see Section 1.1) with jurisdiction over the permanent development project or recurring maintenance activity. The Permittees will have the ability to use or grant the use of their incidental take permits (e.g., through a certificate of inclusion) for implementing the covered activities that are under their purview.

All covered activities must incorporate the relevant conditions on covered activities described in Chapter 6, *Conditions on Covered Activities* to avoid and minimize impacts on covered species and natural communities. Avoidance and minimization measures include requirements for conducting biological resource surveys, establishment of activity exclusion zones, incorporating construction and project design measures, incorporating urban-habitat interface design measures, implementing species-specific avoidance and minimization measures, and implementing best management practices for transportation and urban development-related covered activities. Covered activities are limited by the total amount of impact on and take of covered species and

impact on natural communities identified in Chapter 4, *Impact Assessment and Estimated Level of Take,* and Chapter 5, *Conservation Strategy*.

Part of the approval process for parties seeking coverage under the BRCP is demonstrating that all applicable avoidance and minimization measures have been incorporated or will be incorporated properly into proposed permanent development projects or recurring maintenance activities (see Chapter 8, *Plan Implementation*). The descriptions of covered activities in this chapter have been written to be as consistent as possible with the conditions in Chapter 6, *Conditions on Covered Activities*. If any inconsistencies remain, the condition (described in Chapter 6, *Conditions on Covered Activities*) takes precedence over the description in this chapter.

Permanent development projects and recurring maintenance activities that are submitted for coverage to the Permittees that are not consistent with the covered activities as described in this chapter will be evaluated on a case-by-case basis to determine if they qualify for coverage under the BRCP. If BCAG determines that a specific type of permanent development project or recurring maintenance activity is not included within the descriptions in this chapter, then the project/activity will not receive coverage under the BRCP and will apply for incidental take permits via the existing ESA and DFW permitting processes. Any uncertainties regarding whether a type of project or activity can receive coverage under the BRCP will be resolved by BCAG. A permanent development project or recurring maintenance project will be covered under the BRCP if it meets the following criteria:

- The activity does not preclude achieving the biological goals and objectives of the BRCP (see Chapter 5, *Conservation Strategy*);
- The activity is conducted by or is subject to the jurisdiction of one of the Permittees (see Chapter 1, *Introduction*);
- The activity or project results in a type of impact evaluated in Chapter 4, *Impact Assessment and Level of Take*; and
- Adequate take coverage under the permits remains available for the activity.

The description of covered activities provided in Sections 2.2 through 2.5 broadly defines all of the different types of activities covered by the BRCP. In some cases, specific projects are identified to provide examples that illustrate the general category. However, if a given project meets the guidelines for covered activities as described in this section, then that project is a covered activity.

Over the 50-year permit term of BRCP implementation, it is expected that the Permittees will develop additional types of permanent development projects and recurring maintenance activities. To the extent that these additional activities and projects are generally and qualitatively described below, meet the criteria listed above, are not expressly limited by this

chapter, and are adequately evaluated in Chapter 4, *Impact Assessment and Estimated Level of Take*, these future activities will also be covered by the BRCP.

The descriptions of covered activities in this chapter are primarily qualitative because the design of many of the individual activities has not yet been developed. Consequently, for the purpose of determining the extent of incidental take authorized under the BRCP, it was necessary to develop quantitative assumptions regarding the extent of impacts that could be incurred by those covered activities (e.g., location, extent of project footprints). These assumptions used to conduct the impact assessment are described in Section 4.2, *Impact Assessment Approach*.

2.1.2 Urban Permit Areas

The UPAs (Figure 2–1 and Figure 2–2, Generalized BRCP Land Use Designation Categories Derived from County and City General Plans [see separate file]) were developed primarily to define the locations within the Plan Area where impacts of future urban development as described in Section 2.2 are expected to be incurred based on the Local Agency general plans. Because the intent of the BRCP is to cover all land use designations from all Local Agency general plans that could impact covered species and covered natural communities, the UPAs encompass all such land use designations from the Local Agencies' general plans (except for several isolated parcels designated by Butte County as "agricultural services," which occur outside UPAs). The types of permanent development activities that may be implemented within agricultural services parcels are described in Section 2.3.1.3, *Agricultural Services Permanent Development Activities outside of UPAs*.

Land use designations vary across the Local Agency general plans (81 different designations combined from the five general plans). To conduct the impact assessment described in Chapter 4, *Impact Assessment and Estimated Level of Take*, the various land uses designations were simplified and combined into the following six BRCP land use categories:

- Residential
- Commercial
- Industrial
- Agricultural
- Resource Management
- Public

The distribution of these BRCP land use categories is depicted in Figure 2-1. Table 2-1, *General Plan Land Use Designations Corresponding to BRCP Land Use Categories* crosswalks each of the Local Agency general plan land use designations to the simplified BRCP land use designation categories.

Creating these six general categories for land use provides the ability to view similar types of land use designations across all UPAs. UPA boundaries were developed to encompass BRCP

land use categories that will result in impacts on biological resources (i.e., residential, commercial, and industrial) and also to include existing city limits and spheres of influence. The following provides a brief description of the UPAs.

- The Chico, Oroville and Gridley-Biggs UPAs all include not only residential, commercial, and industrial land use designations associated with these municipalities, but also Butte County land use designations that accommodate future growth.
- The Foothill Area, Bangor and Honcut UPAs are unincorporated areas of Butte County that primarily include foothill area residential land use designations allowing for land subdivisions of 1 to 40 acres per dwelling unit.
- The Nord, Durham, Dayton, Nelson, and Richvale UPAs are small unincorporated farming communities that provide important residential areas and agriculture-related services for the agricultural community.
- The Chico and Gridley Wastewater Treatment Plant (WWTP) UPAs encompass the boundaries of existing and planned facilities associated with the City of Chico and City of Gridley WWTPs. Both municipalities have plans to expand these facilities in the future and these UPAs encompass the area of expected impacts.
- The Neal Road Recycling and Waste Facility UPA includes the existing recycling and waste facility, as well as a 250-foot buffer around the entire site where future expansion is anticipated.
- The State Route (SR) 99 UPA encompasses the boundaries of existing and planned industrial land uses adjacent to the Highway 99/Durham-Pentz Road Interchange.

Table 2-1. General Plan Land Use Designations Corresponding to BRCP Land Use Categories

City of Oroville	City of Biggs	City of Gridley	City of Chico	Butte County
BRCP Land Use Category: Residential				
• Very Low Density Residential • Low Density Residential • Medium Low Density Residential • Medium Density Residential • Medium High Density Residential • High Density Residential • Mixed Use Residential • Rural Residential • Special Planning Area-Oro Bay • Special Planning Area-South Orphir • Special Planning Area-Rio D'Oro	• Low Density Residential • Medium Density Residential • High Density Residential	• Residential, High Density • Residential Low Density • Residential Medium Density • Residential Suburban	• Very Low Density Residential • Low Density Residential • Medium Density Residential • Medium High Density Residential • Residential Mixed Use • High Density Residential • Special Mixed Use • Special Planning Area	• Rural Residential • Very Low Density Residential • Low Density Residential • Medium Density Residential • Medium High Density Residential • High Density Residential • Planned Urban Development • Foothill Residential
BRCP Land Use Category: Commercial				
• Airport Business Park • Mixed Used Commercial • Office Commercial • Retail and Business Services	• Agriculture -Commercial • Commercial • Downtown Mixed Use • Mixed Use	• Commercial • Downtown Mixed Use	• Commercial Mixed Use • Commercial Services • Neighborhood Commercial • Regional Commercial	• Agriculture Services • Research and Business Park • Recreation Commercial • Retail and Office • Sports and Entertainment • Mixed Use
BRCP Land Use Category: Industrial				
• Industrial	• Agriculture-Industrial • Heavy Industrial • Light Industrial • Railroad	• Manufacturing	• Industrial Office Mixed Use • Manufacturing/ Warehousing • Office Mixed Use	• Industrial

Table 2–1. General Plan Land Use Designations Corresponding to BRCP Land Use Categories (continued)

BRCP Land Use Category: Agricultural				
None	• Agriculture	• Agriculture	None	• Agriculture
City of Oroville	**City of Biggs**	**City of Gridley**	**City of Chico**	**Butte County**
BRCP Land Use Category: Resource Management				
• Environmental Conservation/Safety • Resource Management	None	• Open Space	• Primary Open Space • Secondary Open Space	• Resource Conservation • Timber Mountain
BRCP Land Use Category: Public				
• Parks and Recreational Facilities • Public/Quasi-Public • Other Open Space	• Public	• Park • Public	• Public Facilities and Services	• Public

2.2 COVERED ACTIVITIES WITHIN UPAS

This section describes the types of activities within UPAs that are covered under the BRCP. Covered activities implemented within the 15 UPAs include all new public and private sector construction, improvements to existing facilities, and maintenance of existing and new facilities consistent with local general plans and local, state, and federal laws. The list of covered activities provided in this section is not exhaustive, but provides an overview of the types of development activities and actions that the Permit Applicants expect to implement or authorize within the UPAs over the term of the BRCP. They are intended to be as inclusive as possible to accommodate urban growth and all ground-disturbing activities within the 15 UPAs.

All categories of activities listed below are covered activities under the BRCP. The activities described in this section will be implemented under the jurisdiction of the Cities of Biggs, Chico, Gridley and Oroville, the County of Butte, BCAG and Caltrans District 3.

2.2.1 Permanent Development Projects within UPAs

This section describes permanent development projects, including new construction and improvements and expansions to existing facilities within UPAs, that are covered activities under the BRCP. Figure 2–2 depicts some of the land use designation categories within UPAs from the Local Agency general plans that are covered activities under the BRCP. These generally include all land use designations from all Local Agency general plans that could potentially impact covered species and natural communities. Covered permanent development projects within UPAs also include numerous additional urban-related projects, such as transportation and recreation projects, waste and wastewater management facility projects, and flood control and stormwater management projects.

2.2.1.1 Residential, Commercial, Public, and Industrial Facility Permanent Development Projects within UPAs

Table 2-1 lists the residential, commercial, industrial, and public land use designations from Local Agency general plans that are covered activities under the BRCP. These land use designation naming conventions may change as general plans are updated over the 50-year term of the BRCP. All future development under residential, commercial, public, and industrial land use designations are also covered activities under the BRCP.

Covered residential permanent development projects include any new construction, expansion, and repair/restoration of residential units (e.g., single family, multifamily, mixed-use, and mobile homes) and appurtenant infrastructure (e.g., roads, sidewalks, utilities, sewer lines, water lines, stormdrain pipelines, stormwater retention basins), and staging areas. The appurtenant infrastructure primarily includes actions to access, survey, excavate, and construct such infrastructure and connect them to existing mainline electric, gas, sewer, water, storm drain line, and other infrastructure.

Commercial permanent development projects include any new construction, expansion, and repair/restoration of commercial structures (e.g., retail and office buildings) and any appurtenant infrastructure (e.g., utilities, roads, sidewalks, parking lots, sewer lines, water lines, storm drain pipelines, stormwater retention basins). The appurtenant infrastructure primarily includes actions to access, survey, excavate, and construct such infrastructure and connect them to existing mainline electric, gas, sewer, water, storm drain line infrastructure, and other infrastructure.

Covered industrial permanent development projects include any new construction, expansion, and repair/restoration of industrial structures (e.g., warehouses, factories, industrial business parks and manufacturing facilities) and appurtenant infrastructure. Also included are agricultural processing facilities, agricultural byproduct processing facilities (rendering facilities, rice straw processing facilities, etc.), agricultural byproduct energy-generating facilities, biofuel facilities, solar energy–generating facilities, wind energy–generating facilities, and appurtenant infrastructure. The footprint effects of any wind energy–generating facility would be covered, but not the operation of the wind turbines, which results in a different type of impact on species that is not permitted under the BRCP. Ground-disturbing activities resulting from a wind energy project can be covered under the BRCP only after the wind energy project has completed ESA and California ESA compliance for operation and maintenance of such a facility.

Covered public facility permanent development projects include any new construction, expansion, and repair/restoration of public building structures (e.g., government buildings, schools, hospitals, libraries, churches, recreation centers, police/fire stations, military buildings, and cemeteries) and any appurtenant infrastructure (e.g., utilities, roads, sidewalk, parking lots, sewer lines, water lines, storm drain pipelines, and stormwater retention basins). The appurtenant infrastructure primarily includes actions to access, survey, excavate, and construct such infrastructure and connect them to existing mainline electric, gas, sewer, water, storm drain line infrastructure, and other infrastructure.

Covered activities also include all appurtenant infrastructure projects (e.g., utilities, roads, sidewalk, parking lots, sewer lines, water lines, storm drain pipelines, and stormwater retention basins) necessary to support urban development. The appurtenant infrastructure primarily includes actions to access, survey, excavate, and construct such infrastructure and connect them to existing mainline electric, gas, sewer, water, storm drain line infrastructure, and other infrastructure. With the exception of culverts placed in small intermittent drainages along roads within the footprint of permanent development facilities, activities associated with the construction of residential, commercial, public and industrial facility permanent development projects are not expected to include development of in-water structures.

2.2.1.2 Recreation Facility Permanent Development Projects within UPAs

Covered recreation facility permanent development projects include construction of trails and associated pedestrian/bike bridges, interpretive trails, new parks, playgrounds, sport complexes,

golf courses, ball fields, bike paths, restrooms, parking areas, fences, trailheads, racetracks, campgrounds, equestrian facilities, whitewater parks, stormwater detention facilities, and recreational facilities associated with education and interpretation such as nature centers, indoor/outdoor classrooms, amphitheaters, and kiosks. This category also includes appurtenant infrastructure such as utilities and pipelines (sewer/water) for education and interpretation recreational infrastructure, and staging areas. Recreation facility permanent development projects that may require actions within stream channels include the construction of new or replacement pedestrian bridges within designated recreation lands and providing access to white water park facilities. Construction of these facilities may include placement of bridge abutments, removal of vegetation from and armoring of channel banks, and removing debris from channels. Table 2-1 lists the resource management and public land use designations from Local Agency general plans that are covered activities under the BRCP and encompass recreation facility permanent development projects. These land use designation naming conventions may change as general plans are updated over the 50-year term of the BRCP. All future development under recreation/resource management land use designations are also covered activities under the BRCP.

2.2.1.3 Transportation Facility Permanent Development Projects within UPAs

Covered transportation facility permanent development projects include construction of new roadways and bridges and associated infrastructure; road and bridge widening and capacity improvements; freeway interchange improvements; roadway safety improvements; bike lane and bike path projects; park-and-ride lots; transit facilities (e.g., transit stops, shelters, signs, transit centers, transit maintenance yards, transit vehicle refueling stations); rail and light rail facilities; airport expansions; charging stations for electric vehicles; and other such components of transportation infrastructure. Construction of these facilities could include activities such as grading, excavation, placement of fill material, and establishment of staging areas. This category includes projects undertaken by Caltrans, BCAG, and the Local Agencies.

Covered transportation facility permanent development projects that require implementing actions within streams, canals, and other water bodies include roadway and bridge construction and replacement projects that involve constructing new or replacing existing bridges and associated supports, and increasing bridge widths, coupled with guardrail and drainage improvements. In most cases, reconstructed bridges will be wider than the bridges they replace in compliance with ongoing changes in applicable regulations. Some bridges may be widened to accommodate growth in vehicular traffic, bicycles and pedestrians. Road widening will require adding imported borrow and new asphalt, concrete, and aggregate base for pavement. Where structurally and financially feasible, bridges will be constructed as free-span bridges. Where free-span bridges are not feasible, bridges will be built on pile foundation, cast-in-drilled-hole pile, or spread footing foundations. Cofferdams and excavation for foundation construction may be required. Slope paving may be included in the scope of work to protect/improve channel slopes at the bridge. Major bridge repair and rehabilitation may be similar to bridge replacement in scope, often requiring roadway widening, new deck support structures and seismic retrofitting.

2.2.1.4 Pipeline Facility Permanent Development Projects within UPAs

Covered pipeline facility permanent development projects include all activities associated with accessing, surveying, excavating, trenching, constructing underground pipeline infrastructure, backfilling and compaction and any windrowing or storage of overburden material, and restoration of the construction site, and establishment of staging areas. Examples of new pipeline construction covered activities include underground mainline water and sewer lines and storm drainage lines to serve urban development. Additionally, pipeline testing may occur prior to operation which may include filling with water, checking for leakage, testing at an identified surge pressure, and discharging of the uncontaminated water into local storm drains or drainages in a manner that complies with local, state and federal water quality regulations. At stream crossings, new pipelines are expected to be bored under or placed above stream channels and thus are not expected to require implementing actions within stream channels.

2.2.1.5 Utility Services Facility Permanent Development Projects within UPAs

Covered utility services facility permanent development projects include activities associated with construction (including accessing, surveying, excavating/trenching and removing/storing of overburden materials, establishment of staging areas) and installation of the following:

- Electric utilities, including above- and below-ground electric transmission and distribution lines and mainlines, and any improvements or expansions made to these facilities;
- Above- and below-ground telecommunication lines, wireless facilities (e.g., cell towers and associated facilities), and any improvements or expansions made to these facilities; and
- Underground natural gas transmission and distribution mainlines, and any improvements or expansions made to these facilities.

At stream crossings, new utility lines are expected to be bored under or placed above stream channels and thus are not expected to require implementing actions within stream channels.

2.2.1.6 Waste and Wastewater Management Facility Permanent Development Projects within UPAs

Covered waste management facility permanent development projects include construction and expansion of waste management facilities, including landfills, transfer stations, recycling centers, and recycling facilities, and all related appurtenances, and establishment of staging areas. These covered activities are associated with development of the Neal Road Recycling and Waste Facility UPA, including a planned landfill expansion project that will expand the landfill at 1023 Neal Road, and could include such activities as covering, capping, cell development, lining, and access road construction, as well as the construction and expansion of recycling facilities.

Covered wastewater management facility permanent development projects include construction or expansion of WWTPs, temporary WWTPs, pre-treatment wastewater facilities, water recycling facilities, and pump stations. They also include construction (including accessing, surveying, excavating/trenching and removing/storing of overburden materials) and installation of force mains, effluent lines, sewer lines, discharge lines, reclamation lines, and mainlines, and all appurtenant infrastructure. These covered activities are associated with but not limited to the Chico, Gridley, Biggs and Oroville wastewater management facilities.

With the exception of culverts placed in small intermittent drainages along roads within the project footprint of new facilities, activities associated with the construction of waste and wastewater management facility permanent development projects are not expected to include development of in-water structures (e.g., at stream crossings new sewer lines are expected to be bored under or placed above stream channels and thus are not expected to require implementing actions within stream channels).

2.2.1.7 Flood Control and Stormwater Management Facility Permanent Development Projects within UPAs

Covered flood control and stormwater management facility permanent development projects include the construction of new channels, levees/dikes, flood walls, retention/detention basin construction, stormwater channel lining, and water quality control facilities, including associated staging areas, for mitigating stormwater runoff (e.g., sediment barriers, filters, berms) to provide flood control and stormwater management for new development projects within the 15 UPAs.

This covered activity does not include levees or other flood control facilities that may be constructed by the California Department of Water Resources (DWR). DWR is not a permit applicant and its activities are not covered under the BRCP.

Activities associated with the construction of flood control and stormwater management facility permanent development projects are not expected to include development of in-water structures in natural channels.

2.2.2 Recurring Maintenance Activities within UPAs

This section describes recurring maintenance activities involving existing and new facilities that are covered activities within the 15 UPAs. The description of activities provided in this section is not exhaustive but provides an overview of the types of recurring maintenance activities that are expected to occur and be covered under the BRCP. Covered recurring maintenance activities are intended to be as inclusive as possible to accommodate all ground-disturbing maintenance activities that are likely to occur within the UPAs over the term of the BRCP.

2.2.2.1 Recreation Facility Recurring Maintenance Activities within UPAs

Covered recreation facility recurring maintenance activities include maintenance of trails and associated pedestrian/bike bridges, interpretive trails, new parks, playgrounds, sport complexes, golf courses, ball fields, bike paths, restrooms, parking areas, fences, trailheads, racetracks, campgrounds, equestrian facilities, whitewater parks, stormwater detention facilities, and recreational facilities associated with education and interpretation such as nature centers, indoor/outdoor classrooms, amphitheaters, kiosks, and recreational infrastructure associated with sports, education and interpretation. In addition, the cleaning of Sycamore Pool in Big Chico Creek, involving removing silt and debris from the pool and maintenance of the associated bladder dam at Bidwell Park, is a covered activity.

Sycamore Pool is a concrete-lined swimming pool (approximately 100 feet wide by 550 feet long and from 1 to 6 feet deep) within Big Chico Creek in Bidwell Park that is filled from the waters of Big Chico Creek by operation of an air-filled bladder dam that is annually raised from Memorial Day through Labor Day. Maintenance and operation of Sycamore Pool is a covered activity under the BRCP. The dam is operated to be lowered during the winter to allow gravel to clear the pool and to minimize impacts on migrating fish. Recurring maintenance of Sycamore Pool includes annual operation of equipment to remove accumulated silt, gravel and debris from the concrete floor of the pool, and weekly cleaning of the pool. In late May, the pool area is prepared for summer swimming. The pool is drained by diverting water under the pool and the silt, gravel and debris are removed via loader and dump truck. Weekly cleanings of Sycamore Pool, conducted from Memorial Day to Labor Day, require draining the water from the pool, scrubbing any accumulated mud and silt from the concrete pool bottom, and washing off the algae.

2.2.2.2 Transportation Facility Recurring Maintenance Activities within UPAs

There are approximately 158 miles of roadways within the UPAs.[3] Covered transportation facility recurring maintenance activities include rehabilitation and minor improvement (i.e., within the footprint of existing roadways and facilities) of bridges, highways, freeways, interstates, public and private roadways, roadside parking and viewing facilities, transit facilities and rail facilities, as well as all ancillary drainage systems within UPAs. Covered recurring maintenance activities include, but are not limited to, patching, striping, and guardrail and shoulder repair; cleaning of curbs, gutters, ditches, and sidewalks; grading and mowing of existing roadway shoulders and borders; bridge and culvert repair; and erosion and dust control.

Recurring maintenance of bridges and associated drainage structures includes in-stream operation of equipment to repair and prevent scour of the streambed beneath and adjacent to bridge structures; debris and woody debris removal from bridge piers and pilings; vegetation management beneath and adjacent to bridge structures; and erosion/sediment control for bridges and drainage infrastructure beneath and adjacent to bridge structures.

[3] As calculated from the BRCP GIS roadway data layer.

2.2.2.3 Pipeline Facility Recurring Maintenance Activities within UPAs

Covered pipeline facility recurring maintenance activities include all maintenance activities associated with the monitoring, accessing, surveying, excavation/trenching, and installation of replacement underground pipeline infrastructure (e.g., water lines, natural gas lines, sewer lines, main lines, storm drainage lines), and any storage of overburden material and restoration of disturbed ground at the maintenance sites. Recurring maintenance activities associated with pipeline facilities are not expected to include in-water maintenance activities.

2.2.2.4 Utility Service Facilities Recurring Maintenance Activities within UPAs

Covered utility service facility recurring maintenance activities include the maintenance of utilities above and below ground; electric transmission and distribution lines and mainlines; above and below ground telecommunication lines; underground natural gas transmission and distribution lines and mainlines; and wireless transmission facilities (cell towers and associated facilities). Maintenance activities include surveying, excavation and trenching, replacement of above and below ground infrastructure, reconductoring, storage of overburden material, and restoration of disturbed ground at maintenance sites. Recurring maintenance activities associated with utility service facilities are not expected to include in-water maintenance activities.

2.2.2.5 Waste and Wastewater Management Facility Recurring Maintenance Activities within UPAs

Covered waste and wastewater recurring maintenance activities include maintenance of the following: landfills, transfer stations, and recycling stations; existing and new WWTPs, temporary WWTPs, pre-treatment wastewater facilities, and water recycling facilities; force mains and effluent, sewer, discharge, and reclamation lines; pump stations; and sewerage ponds. These covered activities are associated with but not limited to all such activities associated with the Chico, Gridley, Biggs and Oroville Wastewater Management Facilities and the Neal Road Recycling and Waste Facility. Recurring maintenance activities associated with waste and wastewater management facilities are not expected to include in-water maintenance activities.

2.2.2.6 Flood Control and Stormwater Management Recurring Maintenance Activities within UPAs

Covered flood control and stormwater management recurring maintenance activities include the following:

- Maintenance activities on channels, levees, dikes, and retention/detention basins;
- Removal of vegetation and debris from streambeds, channels, storm drainages, flood control facilities, retention/detention basins, ponds, culverts, and associated structures (e.g., inlets, outlets, pipes, trash racks);

- Repair and installation of replacement culverts, stormwater conveyance facilities and outfall structures, local detention/retention facilities, and erosion, sediment control, and bank stabilization structures; and
- Maintenance of water retention facilities, floodplain enhancement, ditch cleaning, culvert replacements, and vegetation control.

Recurring maintenance to remove vegetation and debris from streambeds, channels, ponds, flood control facilities, retention basins, and detention basins includes, but is not limited to, the in-water operation of equipment to do the following:

- Maintain the levees, ditches, canals, drains and service/access roads in the Shasta Union Drainage Area District system (County Service Area [CSA] 23);
- Maintain the levees, ditches, canals, drains and service/access roads in the Pleasant Valley Drainage System (CSA 23);
- Maintain all the detention and retention ponds in CSAs 76, 165, 101, 128, 158, 135, 102, 176, 174, 172, 97, 169, 180 and 183; and
- Maintain the sewerage ponds in CSAs 21 and 82.

Vegetation removal and maintenance of stormwater conveyance canals occurs annually and requires the in-water operation of equipment to mechanically remove emergent and aquatic vegetation and trim trees in channels and canals that transport stormwater runoff from urban areas throughout portions of the City of Chico and other Local Agency jurisdictions. Also included are periodic resloping, grading, scour repair and scour prevention of drainage canals, and regrading and regraveling of service/access roads.

This covered activity does not include levees or other flood control facilities that may be maintained by DWR. DWR is not a permit applicant and its activities are not covered under the BRCP.

2.2.2.7 Vegetation Management Recurring Maintenance Activities within UPAs

Covered vegetation management recurring maintenance activities include vegetation clearing for fire control/fuel breaks, and the trimming and removal of trees, if necessary, to maintain the existing and new permanent development and the infrastructure and other facilities described above that are within UPA's and that are not associated with recurring transportation facility (see Section 2.2.2.2, *Transportation Facility Recurring Maintenance Activities within UPAs*) and flood control and stormwater management maintenance activities (see Section 2.2.2.6, *Flood Control and Stormwater Management Recurring Maintenance Activities within UPAs*).

2.3 COVERED ACTIVITIES OUTSIDE UPAS

This section provides lists and describes the types of activities that will occur outside of the UPAs that are covered under the BRCP. Covered activities implemented outside the UPAs include permanent development projects and recurring maintenance activities of primarily linear infrastructure projects that cross undeveloped lands between urban areas.

2.3.1 Permanent Development Projects outside UPAs

This section describes permanent development projects, including new construction and improvements to existing facilities outside of UPAs that are covered activities under the BRCP.

2.3.1.1 Wastewater Management Facility Permanent Development Activities outside UPAs

Covered wastewater management facility permanent development projects include force main and effluent line construction, discharge and reclamation line installation, and trunk sewer line construction, including the establishment of staging areas. This could include up to 5 miles of new trunk sewer line associated with the Chico WWTP and up to 3 miles of new mainline from Gridley to the Gridley WWTP (see Figure 2–3, *Transportation and Sewerline Projects and Agricultural Services Areas Outside of Urban Permit Areas* [separate file]). The new trunk sewer line and new mainline are assumed to include a 100-foot-wide right-of-way (ROW).

With the exception of culverts placed in small intermittent drainages along roads within the ROW of new facilities, activities associated with the construction of waste and wastewater management facility permanent development projects are not expected to include development of in-water structures (e.g., at stream crossings new sewer lines are expected to be bored under or placed above stream channels and thus are not expected to require implementing actions within stream channels.

2.3.1.2 Transportation Facility Permanent Development Activities outside UPAs

Covered transportation facility permanent development projects outside the UPAs include construction of new roads and bridges; widening and capacity improvements on existing roads and bridges; construction of new roadside parking and viewing facilities, transit facilities, and rail facilities; and safety improvements on existing transportation facilities. Planned transportation facility permanent development projects for which the specific location and type of project are currently known are described below and depicted in Figure 2–3. Covered transportation facility permanent development projects that require implementing actions within streams, canals, and other water bodies are the same as described for transportation facility projects within UPAs in Section 2.2.1.3, *Transportation Facility Permanent Development Projects within UPAs*.

2.3.1.2.1 BCAG and Caltrans Transportation Facility Projects

This section describes specific covered state transportation projects, including establishment and use of borrow sites and staging areas, that will be undertaken by BCAG or Caltrans (see Figure 2–3). These projects include passing lane improvements along SR 70 and improvements to SR 99. The width of new road ROWs on which all construction activity will occur is assumed to average 150 feet. These projects are assumed to require the establishment of four 20-acre borrow sites located within one mile of these road projects.

- **SR 70 Corridor Passing Lane Projects.** Corridor passing lane projects along SR 70 include four segments[4] that will produce a five-lane facility (four lanes with a center turn lane).
- **SR 70 Passing Lane – Segment #1**. Construction of passing lanes from 0.7 mile south of East Gridley Road to 0.4 mile north of Cox Lane (approximately 2.5 miles in length). This project will entail widening the existing two-lane roadway to add additional northbound and southbound lanes as well as a center left-turn lane, resulting in an improved roadway with a total of five lanes.
- **SR 70 Passing Lane – Segment #2**. Construction of passing lanes 0.1 mile south of Palermo Road south to terminus of Segment 1, (approximately 3.25 miles in length). This project will entail widening the existing two-lane roadway to add additional northbound and southbound lanes as well as a center left-turn lane, resulting in an improved roadway with a total of five lanes.
- **SR 70 Passing Lane – Segment #3**. Construction of passing lanes from southerly terminus of SR 70 Passing Lane Segment #2 to the Yuba County line (approximately 3.25 miles in length). This project will entail widening the existing two-lane roadway to add additional northbound and southbound lanes as well as a center left-turn lane, resulting in an improved roadway with a total of five lanes. This project includes new bridges at Honcut Creek on the Butte/Yuba County boundary which will involve widening the existing two-lane bridge into a four-lane bridge, or construction of a separate adjacent two-lane bridge. Center left-turn lane is not anticipated to be required on this bridge structure.
- **SR 99 Improvement Projects**. Planned improvements to SR 99 include intersection improvements and traffic capacity enhancements.
- **SR 99/Neal Road Intersection**. Upgrade existing at-grade intersection to full urban interchange including overcrossing and on/off ramps to address safety issues associated with this intersection. The interchange construction footprint is assumed to be 45 acres.

[4] Only the segments that include areas outside the UPAs are included in this section. Segments of these projects within the UPAs are included in Section 2.2.1.3, *Transportation Facility Permanent Development Projects within UPAs*.

- **SR 99 Capacity Enhancements North**. Widen existing two-lane SR 99 into four-lane expressway north of Chico from Esplanade to Tehama County Line (approximately 7.5 miles in length).
- **SR 99 Capacity Enhancements South**. Widen existing two-lane SR 99 to five lanes from Butte County/Sutter County line to West Liberty Road at the south end of the City of Gridley (approximately 3.5 miles in length) and from Ford Avenue from the north end of the City of Gridley to approximately 0.75 mile south of SR 99/SR 149 interchange (approximately 16.5 miles in length).

2.3.1.2.2 Butte County Rural Bridge Replacement Projects

Covered rural bridge replacement projects include replacement of up to 87 bridges (see Table 2-2, *Covered Rural Bridge Replacement Projects* and Figure 2–3) by the County of Butte over the term of the BRCP. Each of the bridge replacement projects is assumed to require a 2-acre construction footprint, including a 1-acre staging area. The footprint area within which equipment will be operated within stream channels for replacement of bridges across water courses is assumed to encompass 0.26 acre of channel bed.

The lifespan of a typical bridge in Butte County is approximately 50 years and many rural bridges in Butte County have already exceeded this timeframe. While 87 bridge replacement projects have been identified for replacement outside of UPAs (see Table 2–2), it is likely that only a portion of the 87 bridges will be replaced during the 50-year term of the BRCP based on a current lack of funding available for bridge replacement projects. If additional bridge replacement projects are identified during implementation that are not included in Table 2–2, they can also be covered activities as long as the 87-bridge limit is not exceeded and the bridge replacement projects are similar in size and scope to those identified in Table 2–2.

2.3.1.2.3 Butte County Rural New Bridge Construction Projects

Covered new bridge construction projects include construction of new bridges along Ord Ferry Road at "the dips" and a new bridge across Mud Creek. Ord Ferry Road is an east-west route connecting Butte County with adjacent Glenn County via the Ord Ferry Bridge over the Sacramento River. "The dips" include three adjacent yet separate sections of the roadway that flood frequently during the rainy season, causing a public safety hazard and resulting in frequent road closures throughout the winter months. This project involves the construction of three new bridges spanning each of three flood-prone dips (see Figure 2–3). A new bridge will also be constructed across Mud Creek as part of the new Eaton Road extension (see Section 2.3.1.2.5, *Butte County Rural Roadway Improvement Projects* and Figure 2–3). Each of the new bridges is assumed to require a 2-acre construction footprint, including a 1-acre staging area. The footprint area in the Mud Creek channel within which equipment will be operated to construct the new bridge across Mud Creek is assumed to encompass 0.26 acre of channel bed below the bridge centerline. The bridge across Mud Creek is assumed to remove 100 feet of channel bank habitat along each side of the channel associated with placement of bridge revetment material.

2.3.1.2.4 Butte County Rural Intersection Improvement Projects

Covered rural intersection improvement projects include installation of traffic signals and widening of the roadway to accommodate the creation and/or extension of intersection turn lanes and through lanes as well as bicycle and pedestrian facilities (e.g., bike lanes, crosswalks, islands). Covered rural intersection improvement projects will be implemented by the County of Butte and include the following five projects (see Figure 2–3):

- SR 99 at Township Road
- Pentz Road at Durham-Pentz Road
- Dayton Road at Durham Dayton Highway
- Dayton Road at Hegan Lane
- East Gridley Road at Larkin Road

Each of the roadway intersection improvement projects is assumed to require a 3-acre construction footprint, including a staging area.

2.3.1.2.5 Butte County Rural Roadway Improvement Projects

Covered rural roadway improvement projects include projects to extend and widen existing roads, improve their structural integrity, add bike lanes, and other improvements. Covered rural roadway improvement projects will be implemented by the County of Butte and include the nine projects discussed below (see Figure 2–3).

The width of project ROWs, within which all construction activity (including establishment of staging areas) will occur, is assumed to average 150 feet (the approximate length of each road improvement is provided in each project description below). Project equipment staging areas will be located within the 150-foot ROW work areas.

- **Southgate Avenue Extension**. Extension of the existing 28-foot-wide roadway from SR 99 to Midway (approximately 1 mile in length).
- **La Porte Road Reconstruction Project**. Reconstruction of a 2.5-mile segment of roadway to provide additional shoulder width, structural rehabilitation (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.
- **East Gridley Road**. Widening of the roadway from two to four lanes from SR 99 in Gridley to SR 70 to the east (approximately 4.5 miles in length).
- **Oroville-Bangor Highway Reconstruction Project**. Reconstruction of the Oroville-Bangor Highway from North Honcut Creek to White Hall Ravine

(approximately 1.5 miles in length) to provide additional shoulder width, structural rehabilitation (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.

- **Oroville-Chico Highway Reconstruction Project**. Reconstruction of the Oroville-Chico Highway from Durham-Dayton Highway to Estates Drive (approximately 3.5 miles in length) to include additional shoulder width, additional width to add Class 2 bike lanes (4-foot total widening), structural rehabilitation of the roadway (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.
- **Neal Road Reconstruction**. Reconstruction of Neal Road from 4.7 miles east of SR 99 to eastern Plan Area boundary (approximately 2.5 miles in length). The project includes widening the shoulder, widening the road to add Class 2 bike lanes (4-foot total widening), structural rehabilitation of roadway (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.

Table 2-2. Covered Rural Bridge Replacement Projects

1.	Midway at Butte Creek	45.	Johnson Clan Avenue at Live Oak Slough
2.	River Road at Grassy Banks Slough	46.	Afton Road at Main Drain
3.	Ord Ferry Road at Little Chico Creek	47.	Farris Road at Main Drainage (1)
4.	Oroville Bangor Highway at Whitehall Ravine Bridge	48.	Farris Road at Main Drainage (2)
5.	River Road at Shady Oaks Slough	49.	Farris Road at Main Drainage (3)
6.	Central House Road at Wyman Ravine	50.	Afton Road at Butte Creek
7.	Central House Road at Wyandotte	51.	Richvale Highway at High Gravity Lateral
8.	East Evans Reimer at Sutter Butte Canal	52.	Erickson Road at Western Canal
9.	Mesa Road at Durham Mutual Ditch	53.	Nelson Road at Little Dry Creek Overflow
10.	Los Verjeles Road at Honcut Creek	54.	Nelson Road at Durham Slough
11.	Durham-Dayton Highway at Butte Creek	55.	East Rio Bonito Road at Sutter Butte Canal
12.	Oro-Chico Highway at Nance Canyon Stream	56.	Oregon Gulch Road at Morris Ravine
13.	Neal Road at Nance Canyon Stream	57.	Oregon Gulch Road at Oregon Gulch Creek
14.	Colusa Highway at Hamlilton Slough	58.	Oro-Chico Highway at Hamlin Slough
15.	Colusa Highway at Lateral D	59.	Grape Way at Lindo Channel
16.	Midway at Moulton Slough	60.	Cana-Pine Creek Road at Pine Creek

Table 2-2. Covered Rural Bridge Replacement Projects (continued)

17.	Midway at Nelson Slough	61.	Alberton Avenue at Little Chico Creek
18.	Midway at Lost Slough	62.	Edgar Avenue at Comanche Creek
19.	Midway at Hamlin Slough	63.	Middle Honcut Road at Wyandotte Creek
20.	Midway at Butte Creek Overflow	64.	Central House Road at Drainage Ditch
21.	Palermo Honcut Highway at East Branch Wydotte Creek	65.	Bennett Road at Jordan Creek
22.	Pacific Heights Road at Dredger Gulch	66.	Durnell Road at Butte Creek
23.	Table Mtn. Blvd. at Campbell Creek Overflow	67.	Afton Road at Little Dry Creek
24.	West Liberty Road at Belding Lateral	68.	Nord Gianella Road at Channel Crossing
25.	Luckehe Road at Morrison Slough	69.	Nord Gianella Road at Rock Creek
26.	Nord Gianella Road at Pine Creek	70.	Nord Gianella Road at Bare Pole Ditch
27.	Stimpson Road at Wyman Ravine	71.	Dunstone Drive at Wilson Creek
28.	East Gridley Road at Sutter Butte Canal	72.	Lower Honcut Road at Wyandotte Creek
29.	Bangor Park Road at Wilson Creek	73.	Cana Highway at Diane's Ditch
30.	Cana Highway at Dianne’s Ditch No. 2	74.	Bradford Road at Little Dry Creek
31.	Hamilton Nord Cana Highway at Red Barn Slough	75.	Durham Dayton Road at Hamlin Slough
32.	Oak Way at Lindo Channel/Sandy Gulch	76.	Nelson-Shippee Road at Western Canal
33.	Cana Highway at Slough Branch of Pine Creek	77.	Midway at High Lift Lateral Canal
34.	Nelson Road at Ash Creek Overflow	78.	Meridian Road at Grassy Banks Slough
35.	Lone Pine Avenue at Little Chico Creek	79.	Bennett Road at Pine Creek
36.	Crouch Avenue at Little Chico Creek	80.	East Gridley Road at Feather River
37.	Cottonwood Road at Dudley Creek	81.	Openshaw Road at Dry Creek (1)
38.	Richvale Highway at Little Dry Creek	82.	Openshaw Road at Dry Creek (2)
39.	Cottonwood Road at Cottonwood Creek	83.	Middle Honcut Road at Wyman Ravine
40.	Nelson Shippee Road at Little Dry Creek	84.	Larkin Road at Main Drainage Canal
41.	Richvale Highway at Irrigation Canal	85.	Riceton Highway at Lateral A
42.	West Hamilton Road at Biggs Extension Canal	86.	Wilson Landing Road at Rock Creek
43.	West Hamilton Road at Irrigation Ditch Branch of SBC	87.	Pennington Road at Ditch (0.17 mile north of County Line)
44.	Mead Avenue at Branch of Sutter Butte Canal		

- **Los Verjeles Road Reconstruction**. Reconstruction of Los Verjeles Road from La Porte Road to the Yuba County line (approximately 2.5 miles in length). The project

includes widening the shoulder, structural rehabilitation of roadway (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.

- **La Porte Road Reconstruction**. Reconstruction of La Porte Road from the Honcut UPA boundary to the Yuba County line (approximately 14.5 miles in length). The project includes widening the shoulder, structural rehabilitation of roadway (construction of a new structural section involving complete removal of existing roadway including base material and reconstructing new roadway in its place), and minor roadway alignment adjustments.
- **Eaton Road Extension**. Construction of a new four-lane road that would extend Eaton Road westerly to connect to SR 32 (approximately 1.5 miles in length). Total project width is assumed to be 150 feet.

2.3.1.3 Agricultural Services Permanent Development Activities outside UPAs

Covered agricultural services permanent development projects outside the UPAs include construction of agriculture-related service facilities, including associated staging areas, that are complementary to existing agricultural uses, including industrial uses such as processing facilities, commercial uses such as agricultural equipment sales, and technologies that use agricultural byproducts. "Agricultural services" is a land use designation identified in the Butte County General Plan that occurs only on single, isolated parcels that are primarily surrounded by agricultural land. Because this land use designation was only applied to individual isolated parcels, they were deemed too small and isolated to be designated as UPAs. Alternatively, they are being included as a covered activity outside of the UPAs, and represent the only land development activity that is covered under the BRCP outside of the 15 UPAs.

Figure 2–3 depicts locations of individual parcels within the BRCP Plan Area that were designated by the Butte County General Plan as agricultural services and are covered activities under the BRCP. The development footprint for all agricultural services covered activities is assumed to be the entire parcel. With the exception of culverts placed in small intermittent drainages along roads within the footprint of agricultural services facilities, these covered activity projects are not expected to include in-channel development activities.

2.3.2 Recurring Maintenance Activities outside UPAs

This section describes recurring maintenance activities involving existing and new facilities that are covered activities outside of the 15 UPAs. The description of activities provided in this section is not exhaustive but provides an overview of the types of recurring maintenance activities that are expected to occur and be covered under the BRCP. Covered recurring maintenance activities are intended to be as inclusive as possible to accommodate all

ground-disturbing maintenance activities that are likely to occur outside of the UPAs over the term of the BRCP.

2.3.2.1 Wastewater Management Facility Recurring Maintenance Activities outside UPAs

Covered wastewater management facility recurring maintenance activities include the maintenance of force mains, effluent lines, trunk/sewer lines, discharge lines, reclamation lines and mainlines and all related appurtenant infrastructure. This activity includes accessing, surveying, excavating, trenching, removing or storing of overburden materials, and replacement of force mains, effluent lines, trunk/sewer lines, discharge lines, reclamation lines, and mainlines and all related appurtenant infrastructure.

The covered activities include maintenance of approximately 4 miles of existing sewer force mainline east of Gridley and maintenance on 3 additional miles of a new mainline that will be built over the term of the BRCP on a new alignment outside the UPAs associated with the Gridley WWTP (see Figure 2–3 and Section 2.3.1.1, *Wastewater Management Facilities Permanent Development Activities outside UPAs* for the location and description of the new Gridley WWTP mainline).

The covered activities also include maintenance on all of the existing wastewater treatment line associated with the Chico WWTP that are located outside the UPAs (up to 7 miles in length), and maintenance on an additional 5 miles of new line that will be constructed over the term of the BRCP on a new alignment (see Figure 2–3 and Section 2.3.1.1 for the location and description of the new Chico WWTP wastewater treatment line). Maintenance of Gridley WWTP and Chico WWTP wastewater treatment lines is assumed to occur within a 100-foot ROW extending 50 feet on each side of the line centerlines.

Recurring maintenance activities associated with wastewater management facilities are not expected to include in-water maintenance activities.

2.3.2.2 Transportation Facility Recurring Maintenance Activities outside UPAs

There are approximately 311 miles of roadways outside UPAs.[5] Covered transportation facility recurring maintenance activities include rehabilitation (e.g., repainting and washing of facilities, replacement of facility fixtures, trash removal) and minor improvement (i.e., within the footprint of existing roadways and facilities) of existing roadways (e.g., patching, striping, guardrail and shoulder repair, grading and mowing of existing roadways and shoulders); bike paths (e.g., vegetation/landscape maintenance and maintenance of paved/unpaved surfaces); roadside parking and viewing facilities; transit facilities (e.g., transit stops, shelters, signs, transit centers, transit maintenance yards, transit vehicle refueling stations); rail and light rail facilities; airports;

[5] As calculated from the BRCP GIS roadway data layer.

charging stations for electric vehicles; and park-and-ride lots. Covered activities also include maintenance of ancillary drainage systems, gutters, and ditches, and erosion prevention.

Covered bridge and drainage structure recurring maintenance activities include maintenance of bridge structures and associated drainage, including bridge structure protection, bridge structure repair, repair of culverts passing under roads, bridge guardrail repair and replacement, and bridge deck sealing, patching, and painting. Covered in-water recurring maintenance activities include the in-stream operation of equipment to repair and prevent scour of the streambed beneath and adjacent to bridge structures; debris and woody debris removal from bridge piers and pilings; vegetation management beneath and adjacent to bridge structures; and erosion/sediment control for bridges and drainage infrastructure beneath and adjacent to bridge structures.

2.3.2.3 Flood Control and Stormwater Management Recurring Maintenance Activities outside UPAs

Covered flood control and stormwater management recurring maintenance activities outside the UPAs are limited to the ongoing and existing control of vegetation on the top and outer side of levees (i.e., does not include in-stream maintenance or repair of levees) on the Sycamore-Mud Creek system. Maintenance includes actions such as mowing, trimming and removing vegetation from levee surfaces. Recurring maintenance activities associated with flood control and stormwater management are not expected to include in-water maintenance activities.

All other flood control levee and canal maintenance activities within the Plan Area outside of UPAs are conducted by DWR; DWR is not a permit applicant and its activities are not covered under the BRCP.

2.3.2.4 Vegetation Management Recurring Maintenance Activities outside UPAs

Covered vegetation management recurring maintenance activities include vegetation clearing for fire control/fuel breaks, and the trimming and removal of trees, if necessary, to maintain the existing and new permanent development and the infrastructure and other facilities described above that are outside UPA's and that are not associated with recurring transportation facilities (see Section 2.3.2.2, *Transportation Facility Recurring Maintenance Activities outside UPAs*) and flood control and stormwater management maintenance activities (see Section 2.3.2.3, *Flood Control and Stormwater Management Recurring Maintenance Activities outside UPAs*). Recurring maintenance activities associated with vegetation management are not expected to include in-water maintenance activities.

2.4 COVERED ACTIVITIES WITHIN WATER AND IRRIGATION DISTRICTS

This section describes permanent development and recurring maintenance covered activities within WCWD, Biggs-West Gridley Water District, Butte Water District, and Richvale Irrigation District. Figure 2–4, *Irrigation and Water District Boundaries* (see separate file), depicts the

boundaries of each of these districts. While some of the maintenance activities described below focus on specific WCWD covered activities, all of these activities are covered under the BRCP for WCWD, Biggs–West Gridley Water District, Butte Water District, and Richvale Irrigation District.

2.4.1 Permanent Development Projects within Water and Irrigation Districts

Covered permanent development projects within water and irrigation districts include rerouting of up to 12 miles of existing canals averaging 55 feet in width that are operated by the water and irrigation districts over the term of the BRCP. Establishment of staging areas associated with rerouting of canals is also a covered activity. Each of the four districts uses open canals comprised of compact earth to convey water throughout the rice fields within their district. Canals need to be periodically rerouted within the districts to better meet water delivery objectives.

Some portions of the existing decommissioned canals may be reclaimed to a natural state by removing any concrete and other non-natural materials, and restored to better functioning habitat. Other decommissioned canals may be converted to agricultural uses, planted with trees such as cottonwoods, continued to be used as canals, or used to store riprap or other materials.

2.4.2 Recurring Maintenance Activities within Water and Irrigation Districts

Covered recurring maintenance activities within water and irrigation districts include the replacement of water conveyance structures (weirs, siphons, pipes and water elevation control check structures); replacement of pipes extending from canals and ditches to irrigated fields; replacement of laterals; mowing and trimming of vegetation to maintain service road widths throughout the districts; and removal of vegetation and debris from canals, ditches, and laterals. Most recurring maintenance activities are expected to be completed in the winter after the water conveyance structures have been dewatered. Smaller projects will generally be completed every year and larger projects less frequently (i.e., every 4 to 5 years).

Smaller covered recurring maintenance activities primarily include replacement of water delivery structures such as underground pipe and concrete supports. These projects typically occur in already disturbed areas (i.e., none habitat or low-functioning habitat for covered and other native species) and typically include a disturbance area, including the construction zone, of approximately 20 feet by 30 feet per project. Approximately 15 of these smaller projects may be completed per year, per district (up to 60 total small projects annually for all four districts) and are typically done in September through December and late January to early April when the water conveyance structures are dewatered.

Larger projects include replacing larger structures (e.g., large weirs). These projects would typically include a disturbance area, including the construction zone, of approximately 200 feet by 200 feet, all within already disturbed areas (e.g., within the canal itself or on the banks). Typically one large project may be completed every 4 to 5 years per district (i.e., four total large projects every 4 to 5 years for all four districts).

The districts routinely mow and trim vegetation along district service roads to maintain accessibility and operate machinery (e.g., excavators, backhoes, dozers) used to maintain and repair the shape, slope and integrity of canals and canal beds. The clay material used in the canals sloughs off the sides of the canals when water is not being transported through them, which requires periodic resloping of the canals to maintain conveyance capacity. Resloping and repair of canals is typically conducted during fall and mid-January through April, when the canals are not in service.

Machinery (e.g., excavators, backhoes) is used to remove aquatic weeds from canals during the summer months when the water conveyance system is actively transporting water to prevent canals from being choked with vegetation, reducing the capacity of the water conveyance system. The machinery typically does not enter the water conveyance system itself, but is positioned on an adjacent canal service road and reaches into the conveyance system to remove unwanted vegetation with the excavator or backhoe arms.

Recurring maintenance activities to remove aquatic vegetation from canals generally maintain the existing conditions and habitat does not typically reestablish between maintenance events. A portion of the canals is maintained annually while others are maintained less frequently. Typically each year, approximately 5 miles of WCWD canals are repaired and resloped with approximately 50 percent of these being the same canals maintained every year. Every five years, approximately 25 miles of WCWD canals are maintained, and every 10 years approximately 49 miles are maintained. Within the permit term, maintenance activities will have been conducted at least once for all approximately 49 miles of WCWD canals and ditches likely to be maintained. Approximately 1 mile of canal and ditches in total would be expected to be annually maintained among the Biggs-West Gridley Water District, Butte Water District, and Richvale Irrigation District inside the UPAs; and approximately 14 miles in total of canals and ditches would be expected to be annually maintained outside the UPAs among the four participating districts.

2.5 COVERED ACTIVITIES WITHIN CONSERVATION LANDS

This section describes the types of activities that will occur within BRCP conservation lands that are covered under the BRCP. Implementation of some BRCP conservation actions could result in localized adverse effects on covered species and natural communities to provide an overall conservation benefit for the covered species and natural communities. Most of these activities will take place within the system of BRCP conservation lands that will be assembled as described in Chapter 5, *Conservation Strategy*.

Some conservation activities that are also covered under the BRCP may also occur outside of the BRCP conservation lands system on public or private lands. The following describes the types of covered conservation activities that are associated with implementing the conservation actions described in Chapter 5, *Conservation Strategy*.

1. **Habitat management and enhancement**. Habitat management and enhancement-related activities include actions necessary to maintain and enhance the functions of conservation lands as habitat for covered and other native species. Examples of habitat management and enhancement actions include vegetation management and control of nonnative species using a variety of tools, including livestock grazing, controlled fire, manual labor, water management, and mechanical vegetation removal.

2. **Habitat restoration**. Habitat restoration–related activities include actions necessary to restore natural communities and covered species habitat. Examples of habitat restoration actions include ground surface grading and recontouring, vegetation removal, installation of plantings, installation and operation of irrigation systems, and other activities necessary to establish restored physical and biological conditions that support native species habitats. Also included is demolition or removal of structures, roads, or manmade ponds to increase public safety or to restore habitat.

   All habitat restoration and enhancement activities conducted within BRCP conservation lands that are consistent with the requirements of the BRCP are covered activities.

3. **Habitat and species surveys and monitoring**. Habitat and species surveys and monitoring activities include conducting surveys to determine the status of covered species, vegetation communities, and other resources within conservation lands. Activities will include collection of plant material, and observation, trapping, and handling of wildlife. Additionally, surveys for covered species will also be conducted on private land being considered for acquisition by the BRCP as part of the conservation lands system. All survey activities consistent with the BRCP are covered activities under the BRCP.

4. **Directed studies**. Includes implementation of studies to gather information necessary to improve the effectiveness of the BRCP implementation in achieving the biological goals and objectives (Section 5.3, *Biological Goals and Objectives*). Implementation of directed studies may include the establishment of transects, capture of wildlife, collection of plants, and other activities, depending on the nature of the study. All such studies are covered activities under the BRCP.

   Research conducted by biologists on BRCP conservation lands in support of BRCP implementation is a covered activity provided the research projects have a negligible effect on populations of covered species. The researchers must be under legal contract with at least one of the Permittees[6] or hold an ESA section 10(a)(1)(A) recovery permit to cover incidental take that may occur as a result of research conducted on conservation

[6] Authorization for take of species would be provided to the contractor through the Permittee's ESA section 10(a)(1)(B) permit.

lands. Research on BRCP conservation lands unrelated to the BRCP is not a covered activity. Such researchers would be granted access on a case-by-case basis.

5. **General maintenance of conservation lands**. General maintenance–related activities on conservation lands include maintenance of access roads, fences, and fire/fuel breaks; travel through the preserve by foot, all-terrain vehicle, truck, or off-road vehicle; and construction and maintenance of facilities needed to manage conservation lands, including but not limited to reserve field offices, maintenance sheds, carports, restrooms, service roads, bridges, fences, gates, wells, stock tanks, and stock ponds. All such structures will be constructed to minimize impacts on covered species and vegetation communities. Facilities existing at the time of land acquisition will be used whenever feasible. Wells will be installed only as necessary for natural resource management purposes and when no alternative water supplies are available. Wells will be sited so that they do not affect seeps or springs and will not degrade surrounding habitat.
6. **Avoidance and minimization measures**. Avoidance and minimization measures include actions to avoid and minimize adverse effects of conservation activities on natural communities and covered species. Examples of avoidance and minimization measures that could affect covered species and would be covered under the BRCP include preconstruction surveys; implementation of best management practices; and capturing and translocating covered species from construction sites, which could require handling of individuals and temporarily render habitat unavailable to covered species.
7. **Species population enhancement**. Species population enhancement–related actions include seeding of native species; planting of, or introduction of, additional individuals of a specified species population; replenishment of spawning gravels; modification of diversions to minimize fish entrainment; and targeted control of introduced predators (e.g., feral cats and dogs, pigs, nonnative fish, bullfrogs) to benefit a specific covered species' population. Also included is the reintroduction of certain vernal pool covered species to extant vernal pools on soil types upon which surveys indicate that the species once existed.
8. **Public education and access control facilities**. Public education and assess control facility–related actions include the construction of trails, access gates, access barriers, kiosks, signs, and other minor structures that may be required to facilitate conservation-related public education and to control and direct access.
9. **In-water conservation actions**. All of the covered activities described in items 1 through 7 above could require in-water operation of equipment or other activities that could result in the disturbance of aquatic environments. Examples of in-water activities include removal of vegetation from water conveyance ditches and ponds to maintain capacity; re-sculpting of channel banks to restore and enhance aquatic and riparian habitat conditions; placement of spawning gravels and modification of diversions; in-stream monitoring and research activities; maintenance of stream crossings; control of nonnative aquatic species, and capture and translocation of covered amphibian species.

In addition to the conservation-related activities described above, ongoing land uses and activities (e.g., agricultural and grazing practices, infrastructure maintenance activities, use of public roads) as approved in BRCP Conservation Lands Management Plans (see conservation measure CM6, Enhance and Manage Protected Natural Communities in Section 5.4.2, *Natural Community-Level Conservation Measures*) and BRCP conservation easements are covered activities. These allowable uses are described in Section 8.8, *Allowable Activities in BRCP Conservation Lands*.

2.6 EMERGENCY ACTIVITIES ASSOCIATED WITH CHANGED CIRCUMSTANCES

An emergency is a situation involving disasters, casualties, national defense, or security emergencies and includes response activities that must be taken to prevent imminent loss of human life or property (USFWS and NMFS 1998). USFWS, NMFS, and CDFW will not obstruct an emergency response decision made by the Permittees in which human life is at stake. With the exception of changed circumstances addressed in Chapter 8, *Plan Implementation*, impacts on covered species associated with emergencies and responses to emergencies are not covered under the BRCP and its associated permits.

2.7 ACTIVITIES NOT COVERED BY THE PLAN

The BRCP covers a broad range of activities that will be implemented within the Plan Area over the term of the BRCP. There are several types of activities, however, that are not covered under the BRCP because either the activities are not under the jurisdiction of the Permittees or the fish and wildlife agencies, or information about an activity is not sufficiently understood at the time of BRCP development to determine its effects on covered biological resources. Activities not covered under the BRCP that could occur in the Plan Area and may be authorized under the ESA and CESA through separate processes include the following:

- Construction or maintenance of flood control facilities (including the levees on the Sacramento River) under the control or responsibility of the U.S. Army Corps of Engineers (USACE).
- Construction or maintenance of flood control facilities (including the levees on the Feather River) under the control or responsibility of DWR.
- Operations of water control facilities for water conveyance or flood management (including dams, diversions, reservoirs, and bays) under the control or responsibility of the USACE (including facilities outside the Plan Area that affect flows on the Sacramento River in the Plan Area).
- Operations of water control facilities for water conveyance or flood management (including dams, diversions, reservoirs, and bays) under the control or responsibility of DWR (including Oroville Dam, Lake Oroville, Thermalito Afterbay, and Thermalito Forebay).

- Operation of existing water diversion facilities on stream courses, including the Sacramento and Feather Rivers.
- In-channel construction and operation of new water diversion facilities.
- Conveyance or delivery of water through existing or new facilities. However, the maintenance of some conveyance channels (e.g., by BRCP permitted irrigation and water districts) are covered under the BRCP.
- Emergency activities not defined as Changed Circumstances in Chapter 8, *Plan Implementation.*[7]
- Application of pesticides and herbicides.

[7] During the BRCP permit term, the Permittees and those under their jurisdiction may need to respond to emergencies, as defined in Section 2.6, *Emergency Activities Associated with Changed Circumstances* above. The fish and wildlife agencies will not obstruct any emergency response decisions made by the Permittees. Existing ESA consultation regulations will apply to emergency activities (50 *Code of Federal Regulations* 402.05).