

TABLE OF CONTENTS

	<u>Page</u>
1	
2	
3	LIST OF TABLES II
4	LIST OF FIGURES II
5	LIST OF ACRONYMS AND ABBREVIATIONS III
6	CHAPTER 3. COVERED ACTIVITIES 3-1
7	3.1 INTRODUCTION 3-1
8	3.2 PERMANENT DEVELOPMENT 3-1
9	3.2.1 Residential, Industrial, and Commercial Development 3-1
10	3.2.1.1 County General Plan 3-2
11	3.2.1.2 City General Plans and NHP City Planning Units 3-5
12	3.2.1.2.1 City of West Sacramento 3-5
13	3.2.1.2.2 City of Woodland 3-7
14	3.2.1.2.3 City of Davis 3-7
15	3.2.1.2.4 City of Winters 3-7
16	3.2.1.3 University of California, Davis 3-7
17	3.2.2 Public and Private Infrastructure 3-8
18	3.2.2.1 Transportation Projects 3-9
19	3.2.2.1.1 The Dunnigan Specific Plan 3-9
20	3.2.2.1.2 Roadway Improvements 3-12
21	3.2.2.1.3 State Freeways and Highways 3-12
22	3.2.2.1.4 Bicycle Lanes 3-13
23	3.2.2.1.5 Yolo County Public Airports 3-13
24	3.2.2.2 Utility Projects 3-13
25	3.2.2.2.1 Utilities within Dunnigan Specific Plan 3-13
26	3.2.2.2.2 Natural Gas Pipelines 3-14
27	3.2.2.2.3 Davis-Woodland Water Supply Project 3-14
28	3.2.2.3 Recreational Facilities 3-15
29	3.2.2.4 Solar Energy Development Projects 3-15
30	3.2.2.5 Flood Control and Water Conservation Improvements 3-18
31	3.2.2.6 Port of West Sacramento 3-20
32	3.2.2.7 Woodland Water Pollution Control Facility Expansion 3-20
33	3.2.2.8 City of Woodland Water Channel Project 3-20
34	3.2.3 Planned New Agricultural Commercial and Industrial Facilities 3-20
35	3.2.4 Aggregate Mining 3-21
36	3.3 OPERATIONS AND MAINTENANCE (O&M) AND OTHER ONGOING ACTIVITIES 3-24
37	3.3.1 Residential, Industrial, and Commercial Development O&M Activities 3-24
38	3.3.2 Public and Private Infrastructure O&M Activities 3-24
39	3.3.2.1 Transportation Facilities O&M Activities 3-25
40	3.3.2.2 Utilities O&M Activities 3-25
41	3.3.2.3 Recreational Facilities O&M Activities 3-25
42	3.3.2.4 Solar Energy Facilities O&M Activities 3-26
43	3.3.3 Flood Control and Water Conveyance Infrastructure O&M Activities 3-27

1

LIST OF ACRONYMS AND ABBREVIATIONS

CCAP	<i>Cache Creek Area Plan</i>
CCIP	Cache Creek Improvement Program
CCRMP/CCIP	<i>Cache Creek Resource Management Plan/Cache Creek Improvement Program</i>
CLFR	Compact Linear Fresnel Reflector
COI	Certificate of Inclusion
CSMP	Corridor System Management Plan
CSP	concentrated solar power
I-	Interstate
O&M	operations and maintenance
OCMP	Off-Channel Mining Plan
PV	photovoltaic
ROW	right-of-way
SOI	Sphere of Influence
SR	State Route
TAC	Technical Advisory Committee
ULL	Urban Limit Line

1

This page intentionally left blank.

Admin Draft

CHAPTER 3. COVERED ACTIVITIES

[*Note to Reviewer: This chapter presents the best available description of the covered activities at the time of its development and it is acknowledged that this entire Chapter will be updated.*]

3.1 INTRODUCTION

The NHP Plan is designed to provide regulatory coverage under the ESA and the NCCPA for a broad range of ongoing and anticipated public and private activities that occur within the NHP Plan Area. This chapter identifies those activities addressed by the NHP and covered under the associated regulatory permits. The NHP does not cover any type of activity prohibited by this Plan or by state or federal law. The potential effects of these activities on covered species, their habitats, and natural communities have been evaluated as part of an overall assessment of the effects of the NHP, as described in Chapter 4, *Impact Assessment and Estimated Level of Take*. Because the specific location, design, and actions necessary to implement many of the covered activities will be determined over the term of the NHP as planning for each activity progresses, Chapter 4 also describes specific assumptions used to evaluate the impacts of the activities and to define the level of impacts that will be allowable under the Permits (see Table 4-2). In addition to the general categories of covered activities outlined in this chapter, each subsection, where applicable, concludes with a brief discussion of any specific projects that are proposed for coverage as covered activities under the NHP at this time. Inclusion of these projects under the NHP is merely an indication that the proposed projects have reached a level of development in the planning process to be considered for inclusion under the NHP. During the term of the Permits, additional projects will be considered for coverage as covered activities. Projects proposed for coverage during the term of the Permits must meet the description of covered activities in the following sections and will be evaluated by the Implementing Entity and Permittees for consistency with these descriptions and the results of the analysis of the impacts of covered activities on natural communities and covered species (see Chapter 4, *Impact Assessment and Estimated Level of Take*).

3.2 PERMANENT DEVELOPMENT

The following activities are likely to occur within the NHP Plan Area, and may adversely affect covered species and their habitat and the natural communities addressed by the Plan. Subject to the terms and conditions of the NHP, take of covered species associated with these activities will be authorized by the incidental take Permits issued pursuant to the Plan.

3.2.1 Residential, Industrial, and Commercial Development

The Permits will provide incidental take coverage for all covered activities consistent with local general plans and related implementation and land use plans. Local government projections

1 indicate that growth through at least 2035¹ will be concentrated within the planned growth areas
 2 for the incorporated cities of Yolo County and within the adopted community growth boundaries
 3 of unincorporated towns such as Clarksburg, Knights Landing, and particularly Dunnigan at the
 4 northern end of the unincorporated County. Development in these areas will include urban
 5 redevelopment and planned mixed uses including residential, commercial, industrial, and other
 6 related community development. The NHP Plan Area includes the lands where this growth is
 7 expected to occur. Figure 3-1 depicts generalized General Plan land use designations for Yolo
 8 County and the cities of Woodland, Winters, Davis and West Sacramento in the Plan Area as
 9 they relate to trends in future growth and development. Table 3-1 presents the extent of land
 10 area within the incorporated and unincorporated areas of Yolo County.

11 **Table 3-1. Land Area by Jurisdiction**

Jurisdiction	Land Area (acres)
City of Davis	6,355
City of West Sacramento	14,723
City of Winters	1,629
City of Woodland	9,618
Subtotal Incorporated Area	32,325
Unincorporated Area	621,224
Yolo County Total	653,549²

12 Source: County of Yolo 2030 Countywide General Plan, Table IN-1, page IN-2.

13 3.2.1.1 County General Plan

14
 15 The NHP covers all of the activities provided for in the *Yolo County 2030 Countywide General*
 16 *Plan* adopted in November 2009. All lands within the land use designations for development
 17 identified in the County's General Plan (Figure 3-1) are available for development for all
 18 covered activities described in the General Plan. Other than specified avoidance measures (e.g.,
 19 avoidance of riparian habitat) identified in Section 5.4.4, all lands within the County's 2030
 20 General Plan identified for development in Figure 3-1 are covered under the NHP. The area
 21 addressed by the Dunnigan Specific Plan *Draft Land Use Plan* (November 2009) is within the
 22 Yolo County 2030 Countywide General Plan area and all activities related to implementing the
 23 final approved Specific Plan that are described in this chapter are covered activities (Figure 3-1).
 24 Development within unincorporated communities will include urban redevelopment and planned
 25 mixed uses including residential, commercial, industrial, and other related community
 26 development within specified town growth boundaries. Existing urban development comprises
 27 20,053 acres, or about 3 percent of the 621,224 acres in the unincorporated County with the
 28 remainder in agriculture. Build-out of the 2030 County General Plan would result in the
 29 conversion of approximately 4,807 additional acres to urban development (including roadways),

¹ The outer time horizon of general plans in Yolo County.

² The NHP acreage for the Plan Area (i.e., Yolo County) differs from the 653,549 acres of land within Yolo County stated in the *Yolo County 2030 Countywide General Plan* (2009). The 269-acre difference in the area of the County is attributable to the use of different data sets to prepare the NHP and General Plan.

1 bringing the urbanized total to 24,860 acres or about 4 percent.³ Land uses allowed under the
2 2030 County General Plan are provided in Table 3-2.

3

Admin Draft

³Yolo County Board of Supervisors Staff Report, Certification of the General Plan EIR, Final Adoption of the Yolo County 2030 Countywide General Plan, and Associated Actions, November 10, 2009.

1
2

Figure 3-1. Yolo County 2030 General Land Use Diagram

Admin Draft

Table 3-2. 2030 Yolo County General Plan Designated Land Uses for Unincorporated Areas of Yolo County

Land Use Categories	2030 Yolo County General Plan (acres) ¹
Open Space	51,445
Agriculture	544,909
Recreation	890
Residential	3,136
Commercial	647
Industrial	658
Public	7,334
Specific Plan	3,606
Other (roadways, railroads, highways)	8,599
TOTAL	621,224

Source: County of Yolo 2030 Countywide General Plan, Table LU-5, page LU-9.

3.2.1.2 City General Plans and NHP City Planning Units

Permanent development covered activities are described in the general plans for the Cities of West Sacramento, Woodland, Davis, and Winters (collectively referred to as “the cities”). All lands within the NHP Planning Units identified for the cities of West Sacramento, Woodland, Davis, and Winters (Planning Units 19, 20, 21, and 22) (Figure 3-2) are available for development for all covered activities described in the city general plans. Other than specified avoidance measures (e.g., avoidance of riparian habitat) identified in Chapter 5, *Conservation Strategy*, all lands within the city Planning Units identified in Figure 3-2 are assumed developable under the NHP covered activities, except for UC Davis lands (Figure 3-2). Activities within UC Davis–owned lands within the City of Davis Planning Unit (Planning Unit 20) are covered separately; see Section 3.2.1.3, *University of California, Davis*. The following briefly describes the permanent development activities associated with each of these general plans.

3.2.1.2.1 City of West Sacramento

The City of West Sacramento General Plan was last revised and adopted in 2008. An update to this general plan is currently underway. The General Plan area includes 11,761 acres within the incorporated city limits plus 9,446 acres outside of the city limits but within the City’s planning area, for a total of 21,207 acres. Planning Unit 21 incorporates that planning area and the NHP impact analysis assumes full build-out of all undeveloped lands in the Planning Unit 21 with the exceptions noted in Chapter 4, *Impact Assessment and Estimated Level of Take*. The City of West Sacramento is in the process of updating its General Plan and expects to complete the update by the summer of 2014. To the extent that future development and redevelopment associated with the updated General Plan will occur within the limits of the City’s current General Plan planning area, implementation of the updated General Plan will also be covered by the NHP.

1
2

Figure 3-2. City Planning Units and UC Davis Lands

Admin Draft

1 3.2.1.2.2 City of Woodland

2 The *City of Woodland 2020 General Plan* was adopted in December 2001 (City of Woodland
3 2002). The General Plan area includes the 9,624 acres⁴ within the incorporated city limits plus
4 3,148 acres outside of the city limits but within the City's urban limit line, for a total of 12,772
5 acres. Planning Unit 19 encompasses this planning area and the NHP impact analysis assumes
6 full build-out of all undeveloped lands in the Planning Unit 19 with the exceptions noted in
7 Chapter 4, *Impact Assessment and Estimated Level of Take*. The City of Woodland is in the
8 process of updating its General Plan. To the extent that future development and redevelopment
9 associated with the updated General Plan will occur within the limits of the City's current urban
10 limit line, implementation of the updated General Plan will also be covered by the NHP.

11 3.2.1.2.3 City of Davis

12 The City of Davis 2010 General Plan was adopted in May 2001 and updated in January 2007
13 (City of Davis 2007). The General Plan area includes 6,355 acres within the incorporated city
14 limits plus 4,760 acres outside the city limits but within the city's sphere of influence, for a total
15 of 11,115 acres. Planning Unit 20 incorporates this planning area and the NHP impact analysis
16 assumes full build-out of all undeveloped lands in the Planning Unit 20 with the exceptions
17 noted in Chapter 4. Activities covered under the NHP include those described in the General
18 Plan.

19 In addition to development focused within the City of Davis (Planning Unit 20), an additional
20 500 acres would be required for renewable energy projects, a community sports park, and a
21 future business park. These projects will be located near or adjacent to the City of Davis in
22 Planning Unit 11 on lands currently in agricultural production or other nonresidential uses.

23 3.2.1.2.4 City of Winters

24 The *City of Winters 1998 General Plan and Policy Document*, adopted in 1992 (City of Winters
25 1992). The General Plan area includes 1,624 acres within the incorporated city limits plus 405
26 acres outside the city limits but within the city's urban limit, for a total of 2,031 acres. Planning
27 Unit 22 incorporates this planning area and the NHP impact analysis assumes full build-out of all
28 undeveloped lands in the Planning Unit 22 with the exceptions noted in Chapter 4.

29 **3.2.1.3 University of California, Davis**

30 Although UC Davis is not a permit applicant under the NHP, development identified in the UC
31 Davis campus master plan (UC Davis 2003, updated 2006) not covered by the University's
32 single species HCP (valley elderberry longhorn beetle)⁴ could be covered under the NHP through
33 a certificate of inclusion (COI) at the request of the University (see Chapter 7, *Plan*

⁴ Note this acreage differs from that identified in Table 3-1 due to the use of different data sets by the County and the City of Woodland.

1 *Implementation*). The extent of new development within the UC Davis campus planning areas
2 that could be covered under the NHP is limited to 400 acres for all project footprints combined
3 (Figure 3-2).⁵ Specific development actions that will occur in the 400 acres are not identified at
4 this time.

5 **3.2.2 Public and Private Infrastructure**

6 Public and private infrastructure development not associated with specific development projects
7 are also covered under the Plan. This type of development typically involves public works
8 projects or projects that serve the broader community. These projects include, but are not limited
9 to, construction of roadways, bridges, and public buildings; natural gas, electric and alternative
10 energy production (e.g., solar power generation facilities); aviation, railway, bus, and other
11 transportation-related facilities; landfill, recycling and composting facilities; underground and
12 aerial telecommunications lines; cell phone/wireless communication facilities; lighting; cable
13 television lines; flood control structures under the jurisdiction of the cities and County (e.g.,
14 levee construction; only projects under the control of the permit holders are covered),⁶ including
15 the West Sacramento Levee Improvement Program; and bank stabilization. New water
16 monitoring-related facilities covered by the NHP include installation of water measurement
17 devices, scientific measuring devices, and water quality monitoring stations.

18 In addition to the land uses described above, the NHP also covers the development of
19 infrastructure and improvements related to public and private development, including
20 landscaping; leach fields, roads and bridges; lighting; underground and aerial utility and
21 telecommunications lines; and stormwater, wastewater, and water collection, storage, treatment,
22 and conveyance structures and facilities.⁷ Up to 27 existing bridges will be replaced or
23 rehabilitated and three new bridges constructed in the unincorporated County. Stormwater
24 facilities include ponds and basins constructed to detain or retain stormwater; channels/canals,
25 pipes, and culverts designed to route stormwater, including inflow and outflow structures; and
26 facilities or structures constructed solely for the purpose of stormwater treatment or
27 management. Wastewater facilities include pollution control facilities, effluent irrigation
28 disposal and wastewater collector trunk lines.

29 The general locations of spatially defined public and private infrastructure development in the
30 unincorporated County are provided in Figures 3-3a and 3-3b. The general locations of spatially
31 defined public and private infrastructure development in the unincorporated County are provided
32 in Figures 3-3a and 3-3b. Infrastructure development in the incorporated areas (i.e., cities) is
33 assumed to be located within Planning Units 19–22 (Figure 3-2). Covered public and private
34 infrastructure activities in Planning Units 19-22 include those described in the city general plans
35 (see Section 3.2.1.2). The locations identified in Figures 3-3a and 3-3b reflect the expected

⁵ The 400 acres is the estimated development footprint for the purpose of conducting the impact analysis (see Chapter 4) and the allowable extent of allowable impacts associated with these development activities is limited to 400 acres.

⁶ See Section 3.5, *Activities Not Covered by the Plan*.

⁷ This does not include in-channel construction of new water diversion facilities on the Sacramento River or in the Delta.

1 locations of infrastructure facilities in the unincorporated County, but coverage of these activities
2 under the NHP is not limited to the locations depicted in the figures.

3 **3.2.2.1 Transportation Projects**

4 This section describes the transportation-related projects covered under the NHP.

5 **3.2.2.1.1 The Dunnigan Specific Plan**

- 6 • **12A Frontage Road.** Widening improvements and extension of the Frontage Road from
7 the existing Interstate 505 (I-505)/Road 12A interchange, along the western boundary of
8 I-505 and I-5 terminating at Bird Creek.
- 9 • **Bird Creek Bridge.** Construction of a bridge across Bird Creek connecting the Road
10 12A Frontage Road and the circulation.
- 11 • **Road 5.** Widening improvements and water, sewer and dry utility construction within,
12 under and adjacent to Road 5 from the edge of the *Dunnigan Specific Plan* boundary and
13 the proposed water treatment plant and sewage treatment plant facilities located
14 approximately 2 miles east of the *Dunnigan Specific Plan* boundary.
- 15 • **Interchange 6.** Reconfiguration of I-5 and Road 6 interchange including improvements
16 within and adjacent to the current right-of-way (ROW).
- 17 • **Interchange 8.** Reconfiguration of I-5 and Road 8 interchange including improvements
18 within and adjacent to the current ROW.
- 19 • **I-5.** Construction of additional travel lanes on I-5 from or near the Road 6/I-5 interchange
20 to approximately 1,000 feet south of the Road 8/I-5 interchange.

21

1 **Figure 3-3a. Public and Private Infrastructure within the Western Portion of the NHP Plan**
2 **Area**
3

Admin Draft

1 **Figure 3-3b. Public and Private Infrastructure within the Eastern Portion of the NHP Plan**
2 **Area**
3

Admin Draft

1 3.2.2.1.2 Roadway Improvements

2 Portions of the following roadway segments are expected to be improved with intersection
3 control and lane configuration improvements, passing lanes, and wider travel lanes and
4 shoulders:

- 5 • County Road 89 between State Route (SR) 16 and County Road 29A.
- 6 • County Road 102 between County Road 13 and Woodland City Limit.
- 7 • County Road 102 between Woodland City Limit and Davis City Limit.
- 8 • SR 16 between County Road 78 and County Road 85B.
- 9 • SR 16 between I-505 and County Road 98.

10 3.2.2.1.3 State Freeways and Highways

11 Caltrans has completed transportation or route concept reports for a number of State freeways
12 and highways in Yolo County. These following Caltrans activities are a covered activity and
13 take coverage can be provided under the NHP through a COI at the request of Caltrans (see
14 Chapter 7, *Plan Implementation*). Yolo County freeways and highways that have concept
15 reports are I-5, I-80, I-505, SR 16, SR 45, SR 84, SR 113 and SR 128.

16 The *Interstate 5 Transportation Concept Report* (Caltrans 2010a) identifies the 20-year concept
17 for the corridor (through 2016) as maintaining the existing four-lane freeway from the
18 Yolo/Sacramento County line to the Yolo/Colusa County line. The ultimate facility concept for
19 the corridor (beyond 2016) is a six-lane freeway through Yolo County. The concept report for I-
20 5 is currently being updated.

21 The *Interstate 80 Transportation Concept Report* (Caltrans January 2010b) identifies the 20-year
22 concept and ultimate facility for the corridor as widening the existing six lanes through Yolo
23 County (including the Yolo Causeway) to include high-occupancy vehicle lanes in both
24 directions. The concept also includes increasing transit service and implementing traffic
25 operation systems such as ramp metering and changeable message signs along the corridor.

26 In addition to the concept report, a *Corridor System Management Plan* (CSMP) is currently
27 being developed for I-80, which identifies the addition of HOV lanes between Mace Boulevard
28 (in Davis) and Enterprise Drive (in West Sacramento) along I-80 in both directions.

29 The *State Route 16 Transportation Concept Report* (Caltrans 2004) identifies the 20-year
30 concept and ultimate facility for SR 16 as maintaining the existing two-lane conventional
31 highway with the addition of passing lanes, left-turn lanes and bicycle facilities in some sections
32 where feasible.

1 Caltrans has also prepared the *State Route 16 Safety Improvement Project Draft Environmental*
2 *Impact Report/Environmental Assessment* (December 2005) that identifies safety improvements
3 for SR 16 from near the town of Brooks to I-505 (excluding the towns of Capay and Esparto).
4 The project would generally provide 12-foot-wide lanes, 8-foot-wide shoulders and left-turn
5 lanes at appropriate locations. The Safety Improvement Project is not anticipated to provide
6 capacity enhancing improvements.

7 The *State Route 113 Transportation Concept Report* (Caltrans May 2000) contains the 20-year
8 improvement concept for SR 113. The concept facility for the section between I-80 and I-5 is to
9 maintain the existing four-lane freeway, with the ultimate facility identified as a six-lane
10 freeway. The concept and ultimate facility for the section between I-5 and the Yolo/Sutter
11 County line is to maintain the existing two-lane conventional highway. The concept report
12 identifies County Road 102 between Woodland and Knights Landing as a more direct route than
13 the existing SR 113 alignment. The report notes that improvements would be required for both
14 SR 113 and County Road 102 before an exchange between Caltrans and Yolo County would
15 occur.

16 3.2.2.1.4 Bicycle Lanes

17 The NHP will provide coverage for activities associated with the implementation of the Yolo
18 County Bicycle Transportation Plan (Yolo County Transportation Advisory Committee
19 2006). Activities would include widening existing roadways to accommodate 4- to 6-foot bike
20 lanes and the development of new bike paths along existing levee tops or abandoned railway
21 beds (Figures 3-3a and 3-3b) (Yolo County Transportation Advisory Committee 2006). The
22 NHP also covers the Woodland-Davis Alternative Transportation Corridor project.

23 3.2.2.1.5 Yolo County Public Airports

24 Caltrans has recommended enhancements for public airports in Yolo County. The NHP will
25 provide coverage for extending and widening both the Watts-Woodland and University Airport
26 runways and providing 24-hour on-site field-automated weather service at these two airports and
27 the Yolo County Airport.

28 3.2.2.2 Utility Projects

29 This section describes utility-related projects that are covered under the NHP.

30 3.2.2.2.1 Utilities within Dunnigan Specific Plan

31 The following utility construction projects, in addition to underground and above ground
32 transmission, sewer, and water lines, are proposed for implementation within the Dunnigan
33 Specific Plan boundary and are NHP covered activities:

- 1 • **Water Treatment Plant.** Construction of a potable water treatment plant with water
2 transmission lines.
- 3 • **Sewage Treatment Plant.** Construction of a sewage treatment plant and sewage
4 transmission lines.
- 5 • **Solar Farm.** Construction of transmission lines associated with development of a solar
6 energy farm (see Section 3.2.2.4, *Solar Energy Development Projects*), providing energy
7 resources for and within the Dunnigan Specific Plan growth area as well as others within
8 the energy grid.
- 9 • **Electrical Transmission Lines.** Construction of, and connection to, electrical
10 transmission lines that are under the jurisdiction of the County.

11 3.2.2.2.2 Natural Gas Pipelines

12 Construction of the portion of two new gas lines in the Plan Area that are proposed to run from
13 Esparto to Yolo and across Sacramento County is a covered activity and coverage can be
14 provided under the NHP through a COI at the request of project proponents (see Chapter 7, *Plan*
15 *Implementation*). The ROW within which all installation-related work will occur will not exceed
16 243 acres.

17 3.2.2.2.3 Davis-Woodland Water Supply Project

18 The NHP covers the terrestrial components of construction, operation and maintenance of the
19 Davis-Woodland Water Supply Project. The NHP does not cover the construction of in-river
20 facilities on the Sacramento River or the operation of the diversion facility. The Project Partners
21 (Woodland-Davis Clean Water Agency JPA and UC Davis) are proposing to jointly construct
22 and operate a new water diversion facility on the Sacramento River that would include associated
23 conveyance facilities and a new water treatment plant. Coverage for construction and operation
24 of the diversion facility on the Sacramento River that could affect ESA and CESA listed fish
25 species would be addressed through separate ESA compliance with NMFS, USFWS, and DFW
26 for potential effects on fish species. Engineering feasibility studies have evaluated various water
27 diversion/intake sites along the Sacramento River, water treatment plant locations, and pipeline
28 conveyance routes. Specific project components as of June 2011 include the following:

- 29 • Untreated water conveyance pipeline from the diversion facility on the Sacramento River
30 to the regional water treatment plant;
- 31 • Regional water treatment plant within the City of Woodland Planning Unit (Planning
32 Unit 19);
- 33 • Treated water conveyance pipeline water treatment plant;
- 34 • Local storage and distribution facilities.

3.2.2.3 Recreational Facilities

Development of new recreational facilities (both passive and active) by the County and cities is covered under the NHP. Recreational facilities proposed in the *Yolo County Parks and Open Space Master Plan* are depicted in Figure 3-4. Development of new recreational facilities by other entities are a covered activity and take coverage can be provided through issuance of COIs to entities that choose to participate and implement the applicable avoidance and minimization measures described in Section 5.4.4 (see Chapter 5, *Conservation Strategy*). Such facilities include relocation of the Yolo County fairgrounds and construction of athletic fields, child play structures, activity nodes and active play areas, barbeque areas, community gardens, tennis courts, swim facilities, marina facilities, mooring docks, fishing piers, racetracks, golf courses, performance arenas/sports centers, playgrounds, picnic areas, beach areas, nature centers, trails, campsites, overlooks/view platforms, parks, pavilions, restrooms, shade structures, and recreation centers. Infrastructure and amenities associated with these facilities, such as access roads, utilities, signage, landscaping, trash receptacles, lighting, and drinking fountains, are also covered. Many of these new recreational facilities are located within the Woodland, Davis, West Sacramento, and Winters Planning Units (Planning Units 19–22). Development of recreational projects in Planning Units 1–18 (i.e., lands in the unincorporated County) will not affect more than 211 acres of land.

3.2.2.4 Solar Energy Development Projects

The NHP covers the construction, operation, and maintenance activities associated with solar energy projects implemented by the County and Cities, including the Dunnigan Specific Plan. Solar energy projects implemented by other entities are a covered activity and take coverage can be provided through issuance of COIs to entities that choose to participate and implement the applicable avoidance and minimization measures described in Section 5.4.4. The solar energy projects covered under the Plan involve the technologies used today in the conversion of sunlight into electricity: the direct conversion of sunlight using photovoltaics (PV), or the indirect use of sunlight by concentrated solar power (CSP), which focuses the sun's energy to boil water, which is then used to drive turbines for the production of power. PV projects involve the construction of arrays of photovoltaic cells for the direct conversion of sunlight or the use of mirrors or lenses to concentrate the solar radiation onto a photovoltaic module that would in turn convert the radiation into electricity. CSP projects involve the use of mirrors or lenses as part of a collection system that converts the solar energy to heat, and a power block that converts the heat energy to electricity. Possible CSP technologies include parabolic trough, parabolic dish, power tower, or Compact Linear Fresnel Reflector (CLFR). The covered activities associated with these types of projects are similar. Covered activities for solar energy development include the following categories.⁸

⁸ Solar energy development projects are assumed to be implemented within Planning Units 19-22 and within the boundary of the Dunnigan Specific Plan.

- 1 • **Site monitoring and testing.** Prior to the final selection of a site for the development of
2 solar energy projects, sites will need to be monitored and tested for their suitability as a
3 solar site. This monitoring and testing may include the construction of meteorological
4 towers, ground boring or drilling, and the installation of site monitoring devices. The
5 construction of temporary access roads may be required.

- 6 • **Construction.** The construction phase of the projects may include the following:
7 grading, clearing and construction of permanent and temporary roads to establish site
8 access; site grading; grading and clearing of construction lay down areas; construction of
9 the power generating facilities; and construction of project operation facilities and storage
10 areas. The construction of poles, towers, transmission lines, and additional substations
11 necessary for the transmission of the electricity from the solar project to the grid are also
12 a covered activity under the Plan.

13

Admin Draft

1
2

Figure 3-4. Recreational Facilities and Use

Admin Draft

3.2.2.5 Flood Control and Water Conservation Improvements

A number of local flood control and water agencies serve Yolo County. Water conveyance and flood control improvements that may be implemented by these agencies are covered activities (Figure 3-5). Take coverage can be provided for water conveyance and flood control improvements through issuance of COIs to entities choosing to participate (see Chapter 7, *Plan Implementation*). Flood control and water conveyance infrastructure permanent development projects covered under the NHP include the following improvement activities.

- Installing geomorphic controls (such as vanes, weirs, walls, step pools, or other features) in conveyance channels to control grade, velocity, or channel migration; such controls would be designed, to the extent allowable by site constraints and functionality, to mimic features of natural channels.
- Installing gates, checks, culverts, road crossings, or other flow control features in channels.
- Establishing flood flow corridors to train out-of-bank flows into low impact areas that are designed, to the extent feasible, to sustain shallow water depths and slow velocities.
- Installation of ponds, retention basins, or micro-reservoirs that provide operational flexibility (i.e., capacity to adjust timing or amount of delivered water) or flood risk reduction.

Development of flood pathways may be implemented to improve flood conveyance and minimize periodic damage to infrastructure and agricultural lands. The channels conveying flows west to east are mainly modified channels and irrigation supply water delivery canals. The sloughs and canals have various structures installed on them to distribute and divert irrigation water. In winter, these structures are set to limit north and south flows and direct waters from the western hills into the Yolo Bypass. Currently, there is not a coordinated system of storm flow management other than providing for the various irrigation water structures to be set to winter mode. In the future, it is anticipated that canal bank elevations will be adjusted (raised or lowered) to direct out-of-bank flows onto pre-designated flood paths.

Development of flood control and water conservation improvements in Planning Units 1–18 (i.e., lands in the unincorporated County) will not affect more than 505 acres of land (see Table 4-2). The effects of flood control and water conservation improvements located within the Woodland, Davis, West Sacramento, and Winters Planning Units (Planning Units 19–22) are limited to the impact amounts set in the NHP for each of these Planning Units.

1
2

Figure 3-5. Location of Plan Area Flood Control and Water Districts

Admin Draft

3.2.2.6 Port of West Sacramento

The NHP will cover terrestrial impacts of planned development at the Port of West Sacramento, located within the City of West Sacramento Planning Unit, with the exceptions noted in Chapter 4 (Figure 3-2). Representative projects currently in the planning stages and anticipated to be covered by the Plan include a Primafuel biodiesel plant, Sacport Terminal (tank farm), Project Zebra, Project Alpha, and Seaway International Trade Center. In-water projects, such as docks or dredging, that could affect ESA or CESA listed fish species, are not covered by the NHP.

3.2.2.7 Woodland Water Pollution Control Facility Expansion

The NHP will cover the terrestrial impacts of the anticipated expansion of the Woodland Water Pollution Control Facility (a waste water treatment plant) adjacent to the existing facility located at 42929 County Road 24. This expansion area is wholly within the Woodland Planning Unit (Planning Unit 19).

3.2.2.8 City of Woodland Water Channel Project

The NHP covers the construction of the City of Woodland's water channel project involving construction of a water drainage channel. The channel is located within and immediately adjacent to Planning Unit 19.

3.2.3 Planned New Agricultural Commercial and Industrial Facilities

The development of new or expansion of existing agriculture-related facilities and structures in currently undeveloped areas, and the construction of infrastructure associated with such facilities and structures, are covered under the NHP. Examples of such facilities, structures, and infrastructure include fences, barns, corrals, stables, storage buildings, other agricultural primary and accessory structures, animal waste facilities, wells, irrigation ditches, water storage and livestock watering facilities, stock ponds, water pipelines, utilities, and roads. Development of new agriculture-related facilities and structures in Planning Units 1–18 (i.e., lands in the unincorporated County) shall not affect more than 854 acres of undeveloped land. This total includes 103 acres assumed to be located in Clarksburg as shown in Figure 3-3b.

The NHP also covers the development of up to 1,932 farm dwellings on agricultural land in the unincorporated County (i.e., Planning Units 1–18) as defined in the *2030 Countywide General Plan* (Yolo County 2009). These new farm dwellings shall not affect more than 1,932 acres of undeveloped land. The effects of new agriculture-related facilities and structures located within the Woodland, Davis, West Sacramento, and Winters Planning Units (Planning Units 19–22) are limited to the impact amounts set in the NHP for each of these Planning Units (see Chapter 4, *Impact Assessment and Estimated Level of Take*).

3.2.4 Aggregate Mining

The NHP covers aggregate mine development within the Cache Creek Area Plan Boundary (Figure 3-6), including O&M activities because they result in permanent development impacts. Aggregate mining is the principal mining activity presently undertaken in Yolo County. Mineral resources found in a portion of the Capay Valley are identified, described, and regulated through the *Cache Creek Area Plan* (CCAP), which is comprised of the *Cache Creek Resource Management Plan/Cache Creek Improvement Program* (CCRMP/CCIP) (Yolo County 2002) and *Off-Channel Mining Plan* (OCMP) (Yolo County 1996). Chapters 4 and 5 of the Yolo County Code Title 10 regulate off-channel commercial aggregate surface mining within the CCAP. Restoration and maintenance within the channel of Cache Creek is regulated by Chapter 3, Title 10 of the Yolo County Code. The OCMP and relevant implementing ordinances (i.e., the Off-Channel Surface Mining Ordinance and the Surface Mining Reclamation Ordinance), currently authorize seven off-channel mining operations (Teichert-Schwarzgruber, Syar, CEMEX, Teichert-Woodland, Teichert-Esparto, Granite-Capay, and Granite-Esparto) along Cache Creek.⁹ The OCMP encompasses approximately 14.5 miles along lower Cache Creek that contain sand and gravel resources (i.e., Mineral Resource Zone), minus the in-channel area of the creek system. This area is a broad band of varying width that stretches along Cache Creek from Capay Dam to the town of Yolo and includes approximately 28,130 acres. The NHP covers up to 3,000 acres within the OCMP boundary that is already planned for or being considered for new off-channel mining over the next 50 years (the “Aggregate Mining Opportunity Areas” shown in Figure 3-6).

Activities associated with the aggregate mining opportunity areas (Figure 3-6) are expected to include the mining and processing of sand and gravel (i.e., construction aggregate) and the reclamation of the mined lands to such uses as agriculture, lake, habitat, and open space uses. Mining activities typically follow a phased mining plan and the mined aggregate would be processed at rock processing plants within the mine areas.

Typical mining processes begin by clearing vegetation from the surface. Following vegetation removal, the topsoil is typically removed and stored in segregated stockpiles within the project sites for future use in reclamation activities. The stockpiles of topsoil, overburden, and aggregate may be seeded with vegetation cover to prevent erosion and leaching. Runoff from plant sites is typically collected in retention basins. Following completion of each mining phase, the former mined site is reclaimed as cropland, natural habitat, and/or open space uses. Reclamation activities may involve grading, placement of fill, seeding, planting, irrigation, and maintenance of revegetated areas until the desired reclaimed condition is established.

⁹ County mining permits require that mine operators comply with ESA and CESA, including requirements to prepare and implement USFWS approved valley elderberry longhorn beetle mitigation and monitoring plans and to obtain CESA section 2081 permits from DFW.

1
2
3

Figure 3-6. Aggregate Mining Opportunity and Existing Mining Areas

Admin Draft

1 Aggregate mining facilities include sand and gravel processing plants, asphalt-concrete hot mix
2 plants, concrete batch plants, material stockpiles, settling ponds, water wells, stationary and
3 mobile equipment, and haul roads. Mining of off-channel aggregate deposits along lower Cache
4 Creek within the OCMP planning area is expected to continue for the life of the NHP and
5 beyond. The NHP assumes 3,000 additional acres of new mining beyond those approved sites
6 listed above. Additional surface mining operations within the OCMP area, beyond the 3,000
7 acres are likely in the future, although no specific sites or acreages are currently known.

8 Activities associated with off-channel will include the production and disposal of mining waste;
9 prospecting and exploratory activities; excavation of benches; use of conveyor systems; dust
10 control; equipment maintenance; site maintenance; and paved and unpaved road maintenance.
11 Site reclamation and restoration activities within approved mine sites are also covered activities,
12 and may include affected lands surrounding mined lands. These activities may include
13 backfilled excavation improvements (the construction of habitat, trails, roadways, or other
14 recreational/open space facilities proposed for construction in reclaimed mining areas); bank
15 stabilization maintenance (grading, revegetation, and biotechnical/bioengineered stabilization);
16 fencing; grading for field drainage and releveling; resoiling; revegetation; soil compaction; and
17 erosion control.

18 The CCRMP covers the restoration and maintenance of approximately 2,324 acres in-channel
19 along the same 14.5 mile reach of lower Cache Creek. In-channel commercial mining is no
20 longer permitted in the County. These activities are undertaken for the sole and/or primary
21 purpose of stream and bank stabilization, flood protection, and riparian restoration under the
22 Cache Creek Improvement Program (CCIP).

23 A Technical Advisory Committee guides stream monitoring and maintenance activities and
24 identifies initial high priority projects for stream stabilization. Specific maintenance activities
25 are recommended by the Technical Advisory Committee based on annual monitoring
26 information. This includes erosion control, flood control, bank protection, riparian restoration,
27 and other in-channel activities and/or in-channel modifications consistent with the CCRMP and
28 CCIP to protect structures, infrastructure, and land uses along the creek and downstream from
29 damage from natural creek forces (e.g., flooding, erosion, deposition, and washout) and to
30 restore the creek. The general types of in-channel activities include:

- 31 • Habitat preservation and restoration,
- 32 • Aquifer recharge and conjunctive water use,
- 33 • Channel stabilization,
- 34 • Erosion control and Channel Maintenance, and
- 35 • Public open space and recreation.

3.3 OPERATIONS AND MAINTENANCE (O&M) AND OTHER ONGOING ACTIVITIES

This section describes O&M activities and other ongoing activities covered by the NHP. These activities are generally related to existing agricultural operations and the operation of new and existing infrastructure and other facilities, which includes maintenance, repair, and replacement of these facilities. Most of these activities occur as a matter of routine, or on a regularly scheduled basis, or in accordance with regulatory requirements. The following discussion defines general categories of O&M activities covered by the NHP.

3.3.1 Residential, Industrial, and Commercial Development O&M Activities

The NHP covers the operation, rehabilitation, replacement, repair and maintenance of structures, landscaping, and improvements that do not substantively increase the development “footprint” (i.e., development aerial extent or location) of the existing developed sites. These developed sites include residences, commercial and industrial structures, driveways, parking areas and garages, outbuildings, bridge crossings, culverts, fences, barns, corrals, sidewalks, curbs, gutters, and other associated infrastructure and improvements. Activities associated with these improvements include, but are not limited to, mowing, gardening, tree maintenance and removal, resurfacing, repair, rehabilitation, irrigation, lighting, and signage. The NHP also covers activities related to fire control, including the maintenance of fire breaks and fuel management actions, and emergency actions necessary to avoid loss of human life and property (e.g., repair or demolition of flood control infrastructure from imminent flooding; hazardous waste cleanup; demolition of structures and building of new fire breaks to extinguish fires).¹⁰

3.3.2 Public and Private Infrastructure O&M Activities

Effects on terrestrial resources of the operation, maintenance, repair, rehabilitation, and replacement of public and private infrastructure and related facilities that support private development or serve the general public are covered by the NHP. Such infrastructure includes highways, roads, bridges, culverts, bus stops, rail lines, and other transportation infrastructure; water and other service-related facilities, including flood control (e.g., levee repair and vegetation maintenance) and stormwater management facilities under the jurisdiction of the cities and County, and water wells; O&M activities associated with new water monitoring and measuring devices; water and wastewater storage, treatment, conveyance, and disposal facilities; creek and river bank stabilization, dam modification or removal; natural gas, alternative energy, and telecommunications infrastructure; landfill, compost, and recycling facilities; and airport, Port of West Sacramento facilities, sewer plants, water supply, Spring Lake Fire Station, and other Plan Area infrastructure. Repair of electric utility lines and facilities under the jurisdiction of the cities and County are covered within Planning Units 19–22.

¹⁰ The process for addressing effects of emergency actions on covered species is described in Chapter 7, *Plan Implementation*.

1 O&M includes, but is not limited to grading and resurfacing of existing developed lands;
2 construction, repair, rehabilitation, and maintenance of guardrails; signage; installation of safety
3 devices/safety barriers; road sweeping, lighting; drainage measures associated with roads;
4 maintenance, repair and rehabilitation, including necessary modification, of ditches/conveyance
5 facilities, back-slopes, and shoulders; nonchemical vegetation control/removal, seeding, mowing,
6 planting, and nonchemical weed and dust management; fence repair; striping; and curbing. The
7 Plan also covers activities related to fire control, including the maintenance of fire breaks and
8 fuel management actions and emergency actions necessary to avoid loss of human life and
9 property (e.g., repair or demolition of flood control infrastructure from imminent flooding;
10 hazardous waste cleanup; demolition of structures and building of new fire breaks to extinguish
11 fires).

12 **3.3.2.1 Transportation Facilities O&M Activities**

13 Covered activities related to the O&M of transportation facilities include the rehabilitation of and
14 improvements to existing and new bridges, transit facilities including air and rail, highways,
15 freeways, interstates, public and private roadways, bicycle lanes, roadside parking and viewing
16 facilities, and ancillary drainage systems within NHP Planning Units. These O&M covered
17 activities will occur within the ROW of new and existing roadways and facilities. They include,
18 but are not limited to bridge and culvert repair; the patching and striping of bike paths and
19 roadways; guardrail and shoulder repair; the cleaning of curbs, gutters, ditches, and sidewalks;
20 grading and mowing of paths, roadways and shoulders; and erosion and dust control.

21 O&M of bridges and associated drainage structures includes in-stream operation of equipment to
22 repair and prevent scour of the streambed beneath and adjacent to bridge structures; debris and
23 woody debris removal from bridge piers and pilings; vegetation management beneath and
24 adjacent to bridge structures; and erosion/sediment control for bridges and drainage
25 infrastructure beneath and adjacent to bridge structures.

26 **3.3.2.2 Utilities O&M Activities**

27 Covered activities related to the O&M of utility facilities include the rehabilitation of and
28 improvements to structures related to natural gas, electric, water, sewer, communications, and all
29 other utility infrastructure within the urban NHP Planning Units (19-22) under the jurisdiction of
30 the County and cities or entities that request coverage to have their activities covered through a
31 COI. O&M activities include, but are not limited to surveying, excavation and trenching,
32 replacement of above and below ground infrastructure, reconductoring, storage of overburden
33 material, and restoration of disturbed ground at maintenance sites.

34 **3.3.2.3 Recreational Facilities O&M Activities**

35 The NHP Plan covers the management, operations, rehabilitation, replacement, repair, and
36 maintenance of recreational facilities under the jurisdiction of the County and cities and entities
37 covered under a COI. These facilities include, but are not limited to, golf courses, parks, trails,

1 campgrounds, recreation centers, arenas, performance centers, racetracks, fairgrounds, athletic
2 fields, playgrounds, picnic areas, overlooks, marinas, boat docks, equestrian areas, community
3 gardens, tennis courts, swim facilities, fishing piers, beach areas, nature centers, pavilions,
4 restrooms, and shade structures. Repair, maintenance, and replacement of signage, landscaping,
5 trash receptacles, lighting, drinking fountains, and infrastructure necessary to support these
6 facilities are also covered. For example, such activities include maintenance of paved/unpaved
7 surfaces, including parking lots and access roads, landscape maintenance, and vegetation
8 management.

9 **3.3.2.4 Solar Energy Facilities O&M Activities**

10 All authorized O&M activities are covered for incidental take of covered species resulting from
11 appropriate public use of recreational facilities within the Plan Area, inside or outside of NHP
12 conservation lands, provided that usage is consistent with the guidelines in this Plan.

13 During the operation and maintenance of the solar projects over the life of the Plan, additional
14 activities will need to be carried out for the safe and efficient operation of the facilities. These
15 activities will be covered under the Plan and may include the following:

- 16 • Periodic grading and clearing of access roads to provide continued site access;
- 17 • Washing of various aspects of the facilities (i.e., lenses or mirrors);
- 18 • Control of fugitive dust;
- 19 • Vegetation clearing;
- 20 • Maintenance of project facilities;
- 21 • Emergency response (e.g., cleanup of hazardous material spills);¹¹ and
- 22 • Fire protection and security.

23 The decommissioning of any solar facilities or related infrastructure are covered under the NHP.
24 The restoration of sites used for solar energy projects is also a covered activity under the Plan.
25 Decommissioning and restoration could include any of the following general activities for
26 decommissioned solar projects:

- 27 • Remove all structures from the project site including any foundations that are less than 6
28 feet deep;
- 29 • Remove all physical components of the generation structure;
- 30 • Remove all access roads; rehabilitate access roads by removing asphalt, decompacting
31 soil, and revegetating;
- 32 • Decompact and recontour soils associated with project disturbances;

¹¹ The process for addressing effects of emergency actions on covered species is described in Chapter 7, *Plan Implementation*.

- 1 • Revegetate disturbed areas with native species;
- 2 • Remove all exclusion and security fencing;
- 3 • Monitor revegetated areas for success; and
- 4 • Nonchemical control of nonnative weeds.

5 **3.3.3 Flood Control and Water Conveyance Infrastructure O&M** 6 **Activities**

7 The NHP covers terrestrial impacts of local agency flood control and water conveyance O&M
8 activities (Figures 3-4 and 3-7). These activities will be covered for entities that choose to
9 participate through issuance of COIs. Routine O&M activities include the following.

- 10 • Repairing previous erosion control work, including failed rock, gunnite, sacked concrete,
11 gabions, or bioengineered vegetated sections, and extending up to 50 linear feet from the
12 existing damaged feature.
- 13 • Sloping, planting vegetation, placing earthen fill, installing rocks and gabions and using
14 other bank stabilization methods, and taking other necessary measures to control erosion
15 on previously unrevetted areas. These activities extend up to 50 linear feet beyond
16 erosion sites, except where the establishment of native plants is exclusively used to
17 provide erosion control, no 50-foot limit is imposed.
- 18 • Cleaning, washing, painting, or conducting minor repairs on structures within a stream
19 zone with implementation of containment measures to prevent deleterious material from
20 entering state waters and to avoid adverse impacts to fish and wildlife resources.
- 21 • Actions necessary to maintain drainage standards such that watershed alterations do not
22 significantly change channel flow patterns (maintain hydrographs);
- 23 • Maintenance and installation of wells.
- 24 • Vegetation control actions. These include:
 - 25 ○ Cutting, mowing, disking, and spraying of herbicides on grasses, shrubs, and small
26 woody growth to maintain the hydraulic capacity of channels and maintain native
27 plant communities.
 - 28 ○ Cutting, trimming, and removing the lower branches of large trees to facilitate site
29 inspections, maintain channel capacity, and maintain native plant communities.
 - 30 ○ Removing downed trees and dead or live trees that are in clear danger of falling in or
31 across a channel and that would significantly reduce channel capacity, accelerate
32 erosion, or otherwise cause an emergency.
 - 33 ○ Removing dead trees, dying trees, and new trees less than 4 inches in diameter at
34 breast height to maintain channel capacity, prevent erosion, and maintain native plant
35 communities.

- 1 ○ Scraping, scouring, and dredging channels to remove vegetation and/or maintain
2 conveyance capacity and placement of removed material on channel banks or access
3 roads.
- 4 ○ Killing or removing nonnative invasive vegetation by nonchemical means without
5 restriction in conformance with applicable avoidance and minimization measures (see
6 Section 5.4.4, *Avoidance and Minimization Measures*).
- 7 ○ Activities to restore native habitats, including adjusting land contours, shaping
8 channel banks, tilling, plowing, disking or otherwise preparing soils of channel banks
9 and adjacent land for planting of native plants; seeding and planting native plants; and
10 placing habitat features such as nest boxes, resting structures (e.g., bat boxes) or
11 breeding structures.

12 Flows directed into new flood pathways will be managed in a manner to avoid any long-term
13 damage to agricultural soils, and flow management will be supported by measures to ensure
14 rapid recovery following flood events. This type of floodway management will be required to be
15 conducted pursuant to an adopted plan articulating the ecological, agricultural, and hydrological
16 goals for the program.

17 An additional strategy that will be employed on agricultural supply canals is to change from a
18 clean cultivation (which involves herbicide treatment, mowing, and scraping using a grader, land
19 plane, or similar equipment) to a system that maintains vegetation. The advantages of a
20 vegetated system are lower erosion, more stable channel forms, more consistent water delivery,
21 opportunities for enhanced farm-friendly vegetation and the aligned animals (e.g., beneficial
22 predatory insects and pollinators), and potentially lower long-term maintenance costs. The
23 vegetated canal system would provide additional riparian and quasi-riparian habitats. Currently,
24 there are approximately 160 miles of canal and an equal amount of sloughs (approximately 640
25 miles of channel banks) in the County outside of the Yolo Bypass that could support systems of
26 designed vegetation communities. Some of these areas currently support desired vegetation
27 while other areas are essentially weed-infested.

28

1
2

Figure 3-7. Reclamation Districts in the Plan Area

Admin Draft

1 Management actions covered under the NHP to support the transition to the maintenance of
2 channels with vegetated systems include the following:

- 3 • Bank contouring;
- 4 • Grazing;
- 5 • Installation of flow-directing structures;
- 6 • Tilling, ripping, planting of channel vegetation using mechanized planters and hand-
7 planting, and irrigation;
- 8 • Application of irrigation water;
- 9 • Cleanout and removal of obstructions from the channel;
- 10 • Trimming, mowing, burning of bank vegetation; and
- 11 • Repair of banks and structures.

12 **3.3.4 Agricultural and Livestock O&M Activities**

13 All farming and ranching agricultural activities (see Appendix E, *Yolo County Agricultural*
14 *Practices*) are covered activities and take coverage can be provided to individual landowners
15 through issuance of a COI. The NHP covers ongoing agricultural and livestock management
16 activities for enrolled landowners/operators (see Section 7.5.1, *Application Process for Use of*
17 *Take Permits*), including changes in crop types, crop rotations, and fallowing of agricultural
18 fields. These activities involve practices that are customary and necessary for the continuation of
19 existing and new agricultural and livestock grazing operations. These activities include animal
20 grazing; crop rotation and conversion (includes conversion from one crop to another, but does
21 not include the conversion of natural habitats to crop land); planting and harvesting, including
22 plowing, seeding, fertilizing, irrigating, and cultivating; fence installation; vegetation
23 management, including burning, mowing, and invasive weed and pest control (via means other
24 than pesticide/herbicide use); minor drainage modification; and inspection of property.

25 Farming activities include ground preparation (pre-planting and post-harvesting), and can
26 include such practices as disking, deep ripping, shallow ripping, grading, leveling, bedding, and
27 plowing. Cultivating and planting practices can include disking/harrowing, drilling/plugging,
28 and seeding. Fertilization may consist of cover cropping, ground application, air application, and
29 water application. Irrigation practices can include furrowing, flooding, and pressure irrigation
30 (sprinkler/drip). Harvesting practices may consist of cutting, picking, digging, and combining.
31 Pruning can be accomplished by hand or mechanical means. Residue management practices can
32 include burning, grinding, chipping, chopping, and baling. Typical types of equipment used
33 include tractors, harvesting machinery, disks, and plows. Descriptions of agricultural practices
34 for agricultural crop types presently grown in the Plan Area are presented in Appendix E, *Yolo*
35 *County Agricultural Practices*.

1 Common livestock management activities include grazing; fence and access road maintenance;
2 haying; harvesting seed for production; grazing for forest land management; grazing for seasonal
3 wetland management; mowing; constructing fire breaks; conducting pre-suppression and
4 rehabilitation activities; maintaining existing livestock watering facilities; restoration of grasses,
5 forbs, and shrubs; and nonnative plant species management.

6 This category also includes the operation, rehabilitation, replacement, repair and maintenance of
7 the following existing agriculture-related structures and infrastructure: fences; barns; corrals;
8 stables; storage buildings; other agricultural primary and accessory structures; animal waste
9 facilities; wells; irrigation facilities (e.g., stock ponds, ditches, pumps, diversions, and
10 conveyance); road grading; water/wastewater storage, conveyance, treatment, and disposal;
11 utilities; and animal waste treatment and disposal. Maintenance of conveyance facilities includes
12 removal of debris/sediment removal and erosion control to maintain sloughs and other channels
13 that drain or deliver water that are under landowner control.

14 The University of California, Davis engages in agricultural practices for researching new
15 agricultural tools and techniques on existing agricultural lands operated by the University. These
16 activities, including all of the types of activities described above in this section, would be
17 covered under the NHP through issuance of a COI to the University (see Chapter 7, *Plan*
18 *Implementation*).

19 **3.3.5 Aggregate Mining Site O&M Activities**

20 Aggregate mining O&M activities result in permanent land conversion (e.g., the physical
21 removal of aggregate) and are included in the description of permanent development covered
22 activities in Section 3.2.4, *Aggregate Mining*.

23 **3.4 IMPLEMENTATION OF NHP CONSERVATION STRATEGY AND LOCAL** 24 **CONSERVATION STRATEGY**

25 Activities that will be implemented pursuant to the NHP, including all of the actions described in
26 Section 5.4, *Conservation Measures*, Section 5.9, *Local Conservation Strategy*, and Chapter 6,
27 *Adaptive Management and Monitoring*, are covered by the Plan. Habitat management is an
28 integral component of the NHP. The NHP covers all habitat modification, management, and
29 monitoring activities undertaken for the purpose of implementing the NHP. Covered activities
30 include habitat assessments and population surveys; habitat management activities to maintain
31 suitable habitat conditions, including cultivation of specified crop types; establishing and
32 maintaining fuel management zones at the wildland/urban interface; restoration, enhancement,
33 and creation of habitats; construction and maintenance of facilities necessary for the
34 management, maintenance, and access control of NHP conservation lands (e.g., fences, access
35 roads, and outbuildings);¹² control of invasive nonnative species by mechanical means or other

¹² Outbuildings are nonresidential, small-footprint structures necessary for the maintenance and management of the NHP preserve lands such as sheds, workshops, storage facilities, and wells.

1 means; scientific investigation into species' biological characteristics; and all other management
2 and monitoring activities prescribed in the NHP.

3 **3.5 ACTIVITIES NOT COVERED BY THE PLAN**

4 The NHP covers a broad range of activities within the Plan Area. There are several activities and
5 classes of activities that would not be covered by the NHP; these are listed below:

- 6 • Construction and operation of wind energy turbines
- 7 • Operation of existing water diversion facilities on the Sacramento River or in the Delta
- 8 • In-channel construction and operation of new water diversion facilities on the
9 Sacramento River or in the Delta
- 10 • Construction of in-water portions of new facilities at the Port of West Sacramento
- 11 • Fallowing land for sale of water
- 12 • Pesticide and herbicide application
- 13 • In-water activities that could affect ESA or CESA listed fish species, unless such
14 activities obtain separate authorization under ESA and CESA allowing impacts on listed
15 fish species
- 16 • Federally led projects (e.g., levee and flood control projects for which the U.S. Army
17 Corps of Engineers has control over design, minimization measures, compensation
18 measures, and other aspects of the project)