

Item 5

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2 **Chapter 4. Impact Assessment and Estimated**
3 **Level of Take [Draft Annotated Outline]**

4 **4.1 Introduction**

5 **4.2 Impact Assessment Approach**

6 **4.2.1 Estimates of Take**

7 *[This section will describe how take requested under the permits will be estimated.]*

8 **4.2.2 Impact Mechanisms**

9 *[This section will describe the actions associated with implementing each of the covered*
10 *activities, including Yolo NHP conservation measures, that may result in impacts on covered*
11 *species and impacts on natural communities.]*

12 **4.2.3 Assessment of Impacts on Covered Natural Communities**

13 *[This section will describe the methods and analytical tools (e.g., GIS) used to assess impacts on*
14 *each of the natural communities.]*

15 **4.2.4 Assessment of Impacts on Covered Species**

16 *[This section will describe the methods and analytical tools (e.g., GIS) used to assess impacts on*
17 *each of the covered species.]*

18 **4.2.4.1 Species Habitat Models**

19 *[This section will describe how species habitat models were used to assess footprint impacts on*
20 *covered species habitats.]*

21 **4.2.4.2 No Take Species**

22 *[This section describes the covered species for which take will not be permitted or may only be*
23 *permitted if under specified future conditions.]*

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1 **4.2.5 Assessment of Impacts on Designated Critical Habitat**

2 *[This section will describe the methods and analytical tools used to assess impacts on the*
3 *constituent elements of designated critical habitat areas.]*

4 **4.2.6 Covered Activities Assumptions**

5 *[This section will describe the assumptions about how each of the covered activities will be*
6 *implemented that were used to conduct the impact assessment.]*

7 **4.3 Impacts on Covered Natural Communities**

8 **4.3.1 Grassland**

9 4.3.1.1 Impacts of Covered Activities

10 *[For each of the natural communities, this section will summarize the likely permanent and*
11 *temporary direct and indirect impacts of implementing covered activities on the community,*
12 *including physical and biological processes. Footprint impacts on each natural community will*
13 *be summarized by Planning Unit.]*

14 4.3.1.1.1 Construction Impacts

15 4.3.1.1.2 Operations and Maintenance Impacts

16 4.3.1.2 Impacts of Yolo NHP Implementation

17 *[For each of the natural communities, this section will summarize the likely permanent and*
18 *temporary direct and indirect impacts of implementing the conservation measures on the natural*
19 *community.]*

20 **4.3.2 Shrubland and Scrub**

21 **4.3.3 Woodland and Forest**

22 **4.3.4 Riparian and Wetlands**

23 **4.3.5 Agricultural Lands**

24 **4.4 Impacts on Covered Species**

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1 **4.4.1 Alkali Milk-Vetch**

2 [*Note to Reviewers: the following headers repeat for each of the natural communities.*]

3 4.4.1.1 Summary of Impacts

4 [*For each covered species, this section will summarize the likely impact of implementing the*
5 *covered activities and conservation measures on the species populations at regional scales.*]

6 4.4.1.2 Impacts of Covered Activities

7 [*For each of the covered species, this section will summarize the likely permanent and*
8 *temporary direct and indirect impacts of implementing covered activities on the species. Impacts*
9 *on each species habitat will be summarized by Planning Unit.*]

10 4.4.1.2.1 Construction-Related Impacts

11 4.4.1.2.2 Operations and Maintenance Impacts

12 4.4.1.2 Impacts of Yolo NHP Implementation

13 [*For each of the covered species, this section will summarize the likely permanent and*
14 *temporary direct and indirect impacts of implementing the conservation measures on the*
15 *species.*]

16 4.4.1.3 Impacts on Critical Habitat

17 [*For species with designated critical habitat, this section will include an assessment of potential*
18 *effects of the identified covered activities and conservation measures on designated critical*
19 *habitat and the ability to recover the species.*]

20 **4.5 Cumulative Impacts**

21 [*This section will address the cumulative impacts of covered activities, including the Yolo NHP*
22 *conservation measures, on covered species. Cumulative effects are defined under ESA*
23 *regulations as those effects of future state or private activities, not involving Federal activities,*
24 *that are reasonably certain to occur within the action area of the Federal action subject to*
25 *consultation (50 C.F.R. §402.02). This definition differs from the broader definition used under*
26 *NEPA and other environmental laws. The HCP/NCCP will include this analysis to support the*
27 *USFWS section 7 process. In this section, foreseeable non-Federal projects expected to occur in*
28 *the Plan Area will be identified and their probable impacts on covered species are assessed.*
29 *Examples of non-Federal activities that could be included in the assessment of cumulative*

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**Yolo Natural Heritage Program Steering Advisory
Committee Meeting
October 25, 2010**

*Yolo Natural Heritage Program—Working Draft Steering
Advisory Committee Meeting Handout – not approved by
Yolo NHP JPA*

1 *impacts include levee maintenance, fuel control programs, recreational uses, highway*
2 *maintenance, and other non-federal activities that are not covered under the Yolo NHP.]*

3 **4.6 Indirect Effects outside the Plan Area**

4 *[ESA regulations define “indirect effects” as effects that are caused by a proposed action and*
5 *are later in time, but still are reasonably certain to occur. The HCP/NCCP will include this*
6 *analysis to support the USFWS and NMFS section 7 processes. This section will address*
7 *indirect effects on listed species outside of the Plan Area that are the reasonably certain to be*
8 *caused by the covered activities.]*

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