

Appendix E
Screening of Alternatives



Memorandum

To:	Gregg McKenzie, Placer County PCCP Administrator Mike Thomas, U.S. Fish and Wildlife Service Division Chief, Conservation Planning Stephanie Jentsch, U.S. Fish and Wildlife Service Senior Wildlife Biologist, Conservation Planning Division
From:	Sally Zeff, ICF Project Manager, PCCP EIS/EIR
Transmitted:	Via email
Date:	October 5, 2018
Subject:	REVISED Alternatives Screening and Action Alternative Descriptions
Attachment	<i>Implications of Alternative L. Expanded Reserve Acquisition Area for the Land Development under the PCCP (Sally Nielsen, Hausrath Economics Group, memo dated March 14, 2018)</i>

Introduction

This memorandum presents the alternatives screening process and results for the *Placer County Conservation Program (PCCP) Environmental Impact Statement/Environmental Impact Report (EIS/EIR)*, including descriptions of the action alternatives recommended for analysis in the EIS/EIR. This latest draft of this memorandum has been updated and revised to include the revised Alternative 3 developed by Placer County (County) and reviewed by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife (CDFW), the Central Valley Regional Water Quality Control Board, U.S. Army Corps of Engineers (USACE), and the U.S. Environmental Protection Agency (USEPA) (collectively, the *Resource Agencies*).

To select the action alternatives, ICF followed a three-tiered screening process and applied the criteria described in Section 2.2, *Alternatives Screening*, of the PCCP EIS/EIR to 12 potential alternatives.

In the first and second tiers, a potential alternative was advanced to the next tier if the answers to most or all criteria were *possibly* or *unknown*. If the answers to most of the questions were *no* or *not likely*, the potential alternative was rejected. In the third tier, if the answers to all questions were *no*, *not likely*, or *unknown*, the potential alternative was identified as one to be considered in detail in the EIS/EIR. If the answer to any question was *likely* or *yes*, the potential alternative failed the third tier screening and was rejected.

The section entitled *Conclusions of Screening Process*, below, list the screening questions of each tier, and Tables 4–6 in that section present the results of the screening process, including rationales for answers where appropriate.

Description of the Potential Alternatives

Twelve potential alternatives, in addition to the proposed action and the no action alternatives, were screened through the process described above. Some alternatives consist of variations in different components of the PCCP, such as the length of the permit term, types of Covered Activities, or number of Covered Species. Other alternatives were developed during PCCP development and identified by the Resource Agencies as alternatives that should be further analyzed. Three alternatives were identified in anticipation of USACE's use of the EIS/EIR to satisfy its requirements under Clean Water Act (CWA) Section 404(b)(1).

The alternatives screened were:

- A. Reduction in Permit Term to 30 Years
- B. Reduction in Covered Species
- C. Increase in Permit Area
- D. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 2
- E. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 4
- F. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 6
- G. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 7
- H. Habitat Conservation Plan/2081 Conservation Plan
- I. Reserve System Limited to Placer County
- J. No Programmatic General Permit or Letter of Permission Issued by USACE
- K. No Fill Alternative
- L. Expanded Reserve Acquisition Area

These potential alternatives are briefly described below.

Alternative A—Reduction in Permit Term to 30 Years

Under Alternative A, the habitat conservation plan (HCP)/natural community conservation plan (NCCP) would include the same permit conditions for Covered Activities and same conservation measures and conservation strategy as the PCCP, except the permit term would be for 30 years instead of 50. Because of the shorter permit term, longer-term projects would not be covered. Additionally, lower levels of urban and suburban development would be covered. As a result, the amount of conservation would be less, generally in proportion to the lower level of development. Finally, it is expected that less funding would be needed for acquisition, management, and restoration of a lesser amount of conservation lands (i.e., a smaller conservation strategy).

Alternative B—Reduction in Covered Species

Under Alternative B, the HCP/NCCP would only include species currently listed as threatened or endangered under federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA)—a reduction to 10 Covered Species from the 14 Covered Species proposed in the *Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan* (Plan). As a result, the type and amount of conservation lands would likely be reduced. The type and number of Covered Activities as described in the Plan would remain the same under this alternative.

Alternative C—Increase in Permit Area

The area covered by the HCP/NCCP under Alternative C would be expanded to encompass all of Placer County. In 2004, the *Western Placer County Conservation Strategy Overview* described five alternatives for the PCCP that varied largely based on the geographic area that would be covered. Each of the five alternatives included Placer County and all cities (Lincoln, Roseville, Rocklin, Loomis, and Auburn), including the cities' spheres of influence. However, the Cities of Roseville, Rocklin, Loomis, and Auburn are not participating in the proposed PCCP, so the proposed Plan Area does not cover these cities. This alternative would expand the proposed Plan Area to cover activities in each city.

This alternative would include the same permit conditions for Covered Activities and same conservation strategy as the PCCP, in addition to a larger conservation strategy that would be applied to all of Placer County. The increased permit area could potentially include habitat types not included in the PCCP. Under this alternative, additional species could be covered as compared to the proposed PCCP.

Alternatives D–G—Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States

Fewer activities, specifically less development, would be covered by this set of alternatives. Considered here and described below are four of the map alternatives considered during PCCP development in which development areas were reduced and conservation areas were increased, especially wetlands and vernal pools. The descriptions are those originally presented in development of the PCCP, and they refer to the Phase 1 Planning Area of western Placer County (Phase 1 Planning Area) that included the Plan Area of the PCCP as now proposed but encompassed

a slightly larger area. The Phase 1 Planning Area included the Auburn area west to Placer County's border with Sacramento and Sutter Counties, comprising 39 watersheds and encompassing approximately 111,000 hectares (270,000 acres).

Under each of these alternatives, the HCP/NCCP would include the same permit conditions for Covered Activities and the same conservation measures and conservation strategy as the proposed PCCP.

Alternative D—Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 2

Based on Map Alternative 2, Alternative D accommodates the expansion of the city of Lincoln to the existing city limits, sphere of influence, and portions of its general plan update boundary; buildout of the western portions of the city of Roseville's sphere of influence; and growth in a portion of Lincoln's proposed planning area. All of the major development projects proposed in the unincorporated portions of western Placer County are included in the Potential Future Growth Area (PFG) under this alternative, including Placer Ranch, Regional University, Placer Vineyards, and the Brookfield area. This alternative also accommodates buildout of the Sunset Industrial Area.

This alternative proposes urban development in the eastern half of the proposed Curry Creek Community Plan area while incorporating the western portion of the Phase 1 Planning Area into the PCCP Reserve System. Portions of the proposed Lincoln Planning Area, west of Dowd Road, are incorporated into the Map Alternative 2 Reserve System.

Basic Facts

- Approximately 84,000 acres available for incorporation into the PCCP Reserve System.
- Preserves 65% of the existing vernal pool resources in the Phase 1 Planning Area.
- The City of Lincoln, a participating agency in the PCCP, stated that this alternative does not meet its growth objectives as described in its general plan.

Alternative E—Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 4

Alternative E is based on Map Alternative 4, which was prepared by members of the environmental stakeholder subcommittee. This subcommittee included representatives from the Institute of Ecological Health, Sierra Club, Sierra Foothills Audubon Society, Butte Environmental Council, Defenders of Wildlife, and the California Native Plant Society. The majority of growth is proposed in the southern portions of the Phase 1 Planning Area, with land conservation achieved in the northwestern portions of western Placer County. Map Alternative 4 concentrates urban growth in the Curry Creek Community Plan area, Regional University, Placer Vineyards, and portions of land located south of Curry Creek, west of Brewer Road, to the Placer/Sutter County boundary. This alternative proposes land conservation for a significant portion of the Sunset Industrial Area, the western half of Placer Ranch, the Brookfield project, the Lincoln Planning Area, and within portions

of Lincoln's current city limits. The majority of urban growth in Lincoln is achieved through infill within the existing city limits, as well as growth in Lincoln's current sphere of influence boundary.

Basic Facts

- Approximately 82,000 acres are available for incorporation into the PCCP Reserve System.
- Preserves 60% of the existing vernal pool resources in the Phase 1 Planning Area.
- The City of Lincoln, a participating agency in the PCCP, has stated that this alternative does not meet its growth objectives as described in its general plan.
- The County has significant concerns with this alternative because of a significant reduction in the non-residential holding capacity of the Sunset Industrial Area and loss of the California State University site in the Placer Ranch project.

Alternative F—Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 6

Alternative F is based on Map Alternative 6, which was prepared by the County with specific input from the Resource Agencies, including the delineation of the Reserve System boundary. The Reserve System under this alternative focuses on preserving vernal pool resources and establishing continuity within the reserve areas. North of Phillip Road, the urban growth areas proposed in Map Alternative 6 are similar to those proposed in Map Alternative 4, although Map Alternative 6 accommodates full buildout of the existing Lincoln city limits as well as buildout of the Sunset Industrial Area. The western half of Placer Ranch is proposed for incorporation into the Reserve System. South of Phillip Road, this alternative accommodates full buildout of Regional University and urban growth in the eastern half of the proposed Curry Creek Community Plan area. The western one-third of the Placer Vineyards Specific Plan area and the western half of the Curry Creek Community Plan area are proposed for incorporation into the Reserve System.

Basic Facts

- Approximately 87,000 acres are available for incorporation into the PCCP Reserve System.
- Preserves 73% of the existing vernal pool resources in the Phase 1 Planning Area.

Alternative G—Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 7

Alternative G is based on Map Alternative 7, which was prepared by the County with specific input from the Resource Agencies, including the delineation of the Reserve System boundary. Similar to Map Alternatives 2 and 6, the Reserve System under this alternative focuses heavily on vernal pool resource preservation and on establishing continuity within the reserve areas. The urban growth areas in Map Alternative 7 are nearly identical to Map Alternative 2. This alternative includes an additional reserve area near Lincoln's southwest city limits along Industrial Boulevard. This alternative accommodates the expansion of Lincoln to its city limits, buildout of the western

portions of Roseville's sphere of influence, and growth in portions of Lincoln's proposed planning area. In addition, all of the major development projects proposed in the unincorporated portions of western Placer County are identified for growth, including Placer Ranch, Regional University, Placer Vineyards, and the Brookfield project. Map Alternative 7 identifies future growth in the Sunset Industrial Area, as per the County's General Plan. Similar to Map Alternatives 2 and 6, this alternative proposes urban development in the eastern half of the proposed Curry Creek Community Plan area while incorporating the western portion of the Phase 1 Planning Area into the PCCP Reserve System. Portions of the proposed Lincoln Planning Area, west of Dowd Road, are incorporated into the PCCP Reserve System.

Basic Facts

- Approximately 84,000 acres are available for incorporation into the PCCP Reserve System.
- Preserves 66% of the existing vernal pool resources in the Phase 1 Planning Area.

Alternative H—Habitat Conservation Plan/2081 Conservation Plan

Alternative H would include the same Covered Activities (i.e., level of development) as the proposed PCCP, but its conservation strategy only identifies lands needed for mitigation to satisfy ESA and CESA (i.e., an HCP/2081, not an HCP/NCCP). Since NCCPs typically have a contribution to recovery component, which generally expands the amount of land conserved, it is anticipated this alternative without the NCCP would reduce the amount of land conserved when compared to the PCCP. This alternative is assumed to have fewer Covered Species. We note that an HCP can include non-listed species; however, only state-listed species can be covered by a 2081 permit (therefore, state special-status species that are not federal special-status species are not likely to be covered).

Alternative I—Reserve System Limited to Placer County

The proposed PCCP allows for the extension of conservation activities outside of its Plan Area in several locations. Alternative I would include the same Covered Activities, Covered Species, and permit term as the PCCP, but conservation activities would be carried out only in Placer County.

Alternative J—No Programmatic General Permit or Letter of Permission, or Regional General Permit Issued by USACE

Alternative J would include the permit conditions and conservation strategy of the proposed PCCP without the issuance of a Programmatic General Permit (PGP), Letter of Permission (LOP), or Regional General Permit (RGP) by USACE. Therefore, under this alternative, the effects of Covered Activities on waters of the United States, including wetlands, would be evaluated on a project-by-project basis using existing permitting mechanisms (i.e., Nationwide Permit Program, Sacramento District's Minor Impact LOP, and Standard Permit process).

Alternative K—No Fill

Under Alternative K, no fill of waters of the United States, including wetlands, would be allowed. This alternative would include the permit conditions and conservation strategy of the proposed PCCP without the issuance of a PGP nor LOP by USACE and would restrict the activities of the Permit

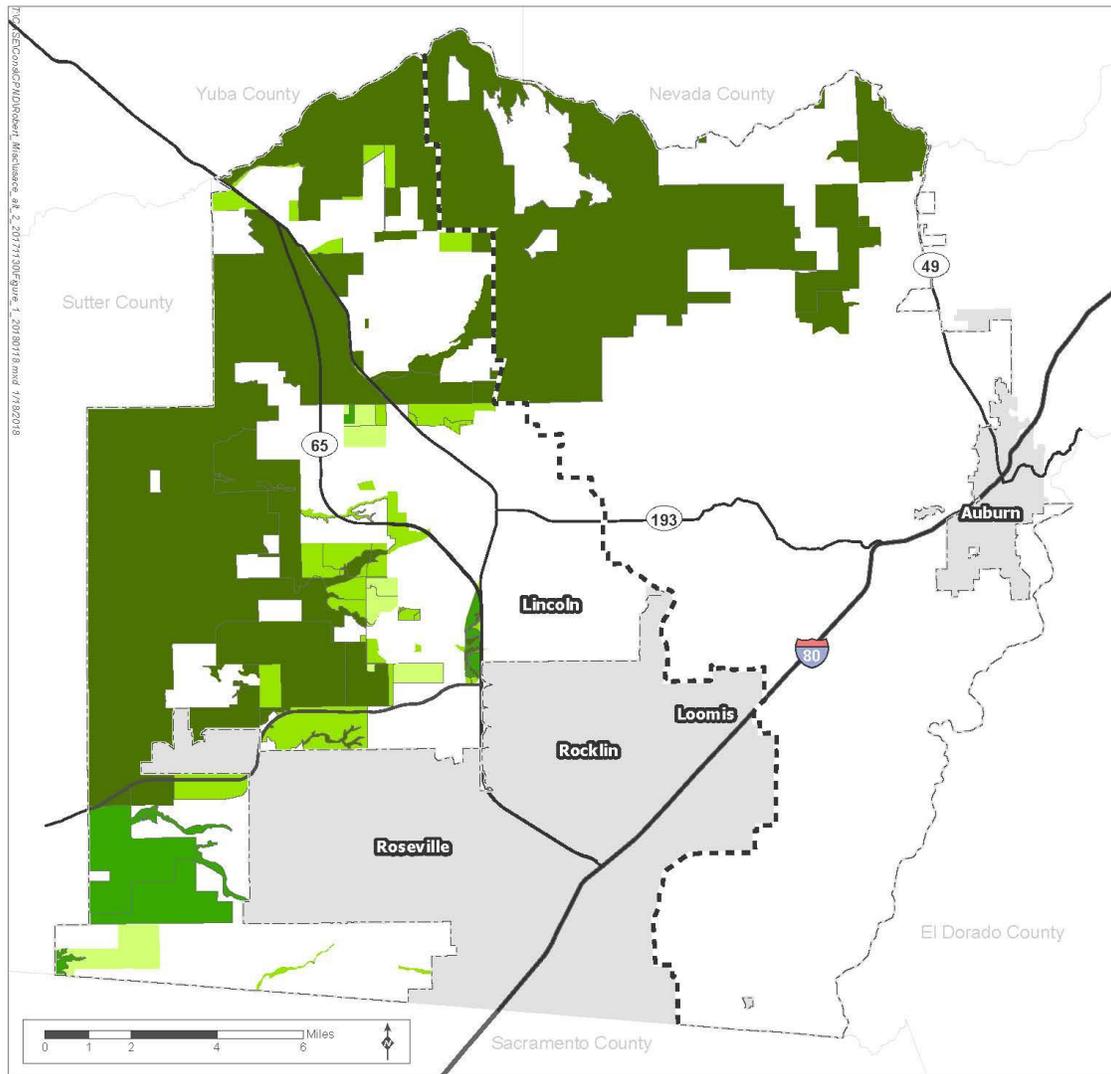
Applicants (i.e., the County, City of Lincoln, South Placer Regional Transportation Authority [SPRTA], Placer County Water Agency [PCWA], and (once formed) the Placer Conservation Authority) such that no fill would be allowed.

Alternative L—Expanded Reserve Acquisition Area

Alternative L consists of all areas designated as Reserve Acquisition Area (RAA) under Alternatives D, E, F, and G, which vary in how and where the PFGs were identified at the interface with the RAA. Figure 1 shows the areas designated as RAA in these alternatives; dark green depicts areas identified as RAA in all four alternative maps (i.e., Map Alternatives 2, 4, 6, and 7); lighter shades appear as RAA in only one or two of the alternative maps.

Alternative L is shown in Figure 2, which was developed by taking the outer envelope of RAA in the Valley in all Map Alternatives 2, 4, 6, and 7. In the Valley, this alternative reflects a contracted PFG where most urban development would occur and an expanded RAA where development would not be a Covered Activity.

Within the expanded RAA of Alternative L are all areas designated as RAA in the proposed PCCP map. It does not differ from the proposed PCCP map with respect to the Foothills nor areas designated as Existing Reserves and Other Protected Areas (EXR).



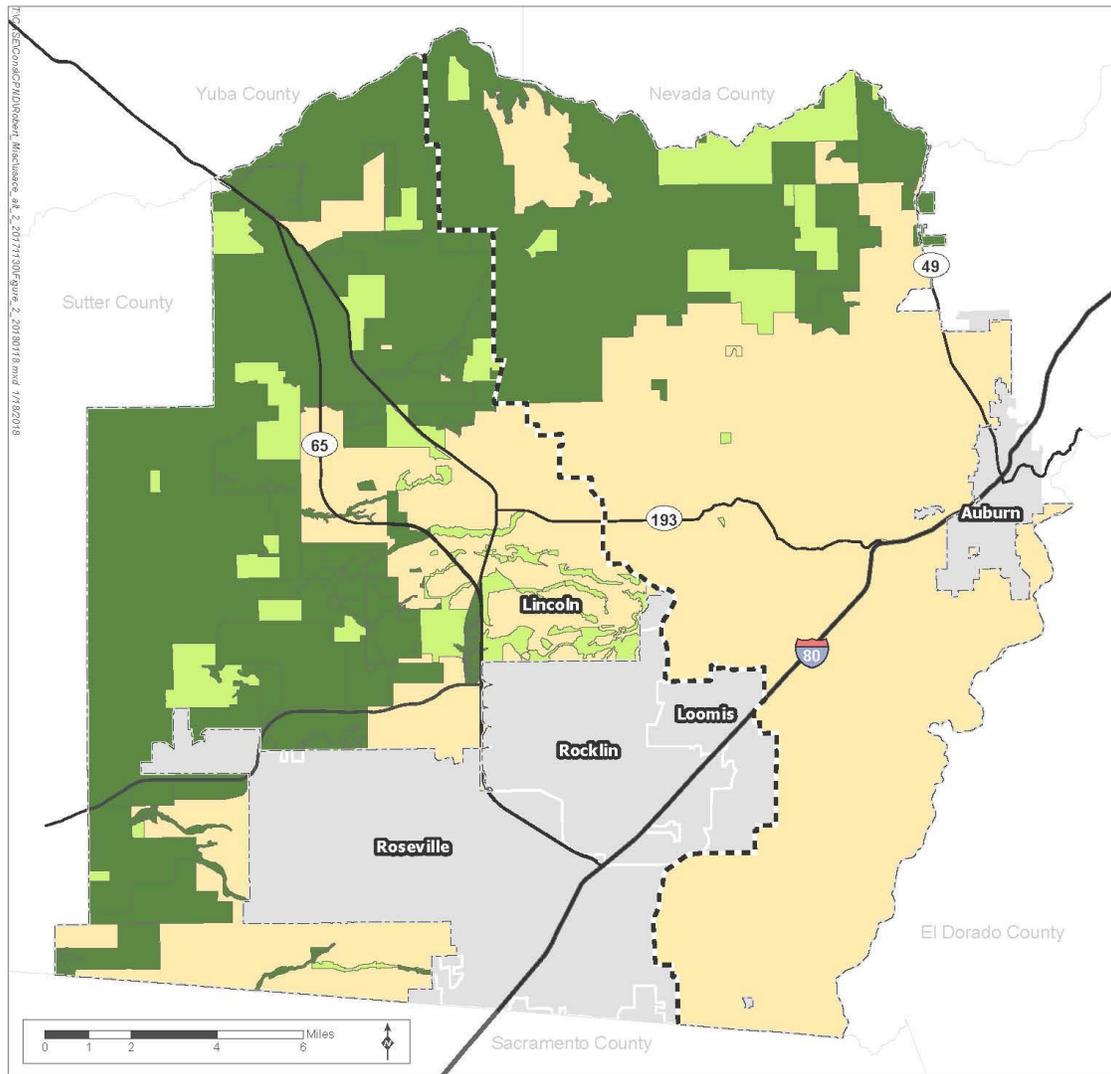
Source: Placer County, 2017; MIG 2018

- | | |
|---|------------------------|
| Designated as RAA in Four Map Alternatives | Non-participating City |
| None | Plan Area A |
| RAA in at least one map | Valley/Foothill Divide |
| RAA in two maps | Highways |
| RAA in three maps | Interstate |
| RAA in all four maps | |

Figure 1 RAA inclusion in four map alternatives

Placer County Conservation Program - Western Placer County HCP/NCCP





- Reserve Acquisition Area (RAA)
- Potential Future Growth Area (PFG)
- Existing Protected Area (EXR)
- Non-participating City
- Plan Area A
- Valley/Foothill Divide
- Highways
- Interstate

Figure 2 Expanded RAA Alternative based on Composite map:
Any RAA in 2007 Alternatives



Table 1 quantifies the differences in acreages in designations under Alternative L as compared to the proposed PCCP. The area designated as RAA would be 60,806 acres, approximately 16,702 acres greater than the proposed PCCP. Accordingly, the PFG would be contracted by the same amount, reduced by 36% from the proposed PCCP.

Table 1. Designations in the Valley under Alternative L—Expanded RAA and the Proposed PCCP (acres)

Project/Alternative	PCCP Designation in Valley			
	EXR	PFG	RAA	All Valley
Proposed PCCP	9,854	46,949	44,104	100,907
Alternative L—Expanded RAA	9,854	30,247	60,806	100,907

An analysis was prepared by the County of land use and development implications of Alternative L for implementation of the County's General Plan. This analysis is found in the memo prepared by Hausrath Economics Group and attached to this memo. A summary of the potential consequences of Alternative L for the balance of land development and conservation in Western Placer County as described in that memo follows:

- Under the 50-year growth scenario, the land designated for urban development in Western Placer County (the land area identified as the PFG under Proposed PCCP) does not reach buildout. Specifically, the housing, population, and employment growth forecast for the 50-year permit term absorbs about 20,000 acres of the Valley PFG, as noted above. This leaves roughly 10,000 acres of remaining Valley PFG to absorb more population and employment growth beyond the PCCP take authorizations [29,899 acres (from Table 1 of the Hausrath Economics Group memo) – 19,545 = 10,354 acres].
- By contrast, because Alternative L reduces the new development potential of the Valley PFG by more than 50 percent, this smaller land area would most likely be fully developed within the 50-year permit term horizon, possibly by year 35 based on the rough growth scenario outlined in the PCCP (Table 2-5. Land Development to Accommodate Growth for the 50-year Permit Term by 10-year Period and HCP Appendix M. Growth Scenario Memo). Notably, the total amount of development covered under the PCCP would be substantially reduced because of the reduced size of the PFG, resulting in the inability to fully assemble the 47,000 acre Reserve System through a comprehensive plan (the PCCP's conservation strategy), therefore not meeting a fundamental project objective.
- To the extent the expanded RAA designation resulted in a de facto decrease in total development potential, development land remaining within the smaller PFG would likely be developed at higher densities to accommodate demand. This would result in less development mitigation relative to population and employment growth compared to the balance under the Proposed PCCP.
- Some residential and non-residential development that would be accommodated in unincorporated western Placer County and the City of Lincoln under the PCCP would instead be accommodated in Roseville (also in Placer County) or, alternatively, outside of Placer County elsewhere in the region. This would be counter to the stated PCCP purpose of "allowing appropriate and compatible growth in accordance with applicable laws".

- Urban development and associated case-by-case mitigation would likely proceed within the expanded RAA according to planned land use designations resulting in inconsistent, patchwork mitigation that is not subject to PCCP requirements and is unlikely to achieve the goals of the PCCP regional conservation strategy.

Conclusions of Screening Process

First Tier Screening Criteria

The legal requirements of CEQA and NEPA were considered in the context of the statements of project objectives and purpose to develop the following first tier screening criteria.

- Could the potential alternative protect and enhance ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws?

These criteria assume that allowing appropriate and compatible growth in accordance with applicable laws includes allowing sufficient land area for development under the general plans of the City of Lincoln and Placer County. As detailed in Plan Appendix M, sufficient land area was defined as shown on Table 2-5 of the Plan, reprinted below.

PCCP Table 2-5. Land Development to Accommodate Growth for the 50-year Permit Term by 10-year Period (acres)

Plan Area Component	Cumulative Land Area Developed, by 10-year Period (acres)				
	Year 10	Year 20	Year 30	Year 40	Year 50
Plan Area A					
A1 Valley PFG ^a	2,027	5,377	10,606	15,683	19,545
A2 Valley Conservation and Rural Development ^b	250	320	400	480	570
A3 Foothills PFG ^c	1,999	3,997	5,996	7,993	9,993
A4 Foothills Conservation and Rural Development ^c	201	403	604	806	1,007
All Plan Area A	4,477	10,097	17,606	24,962	31,115
Plan Area B ^d					
B1 Permittee Activity in Non-participating City Jurisdiction	385	395	405	415	425
All Plan Area	4,862	10,492	18,011	25,377	31,540

Sources: Hausrath Economics Group and MIG|TRA Environmental Sciences.

^a Area of land development reflecting City of Lincoln and Placer County general and specific plans (see Appendix M, *Growth Scenario Memo*, Table A.1) and a generalized factor of 15 percent additional land development to account for infrastructure, rights-of-way, and public facilities.

^b Estimates for rural development in the Valley developed by MIG|TRA Environmental Sciences include allowance for public infrastructure.

^c Foothills growth scenario estimates by Hausrath Economics Group adapted to available land and general plan land use designation by MIG|TRA Environmental Sciences.

^d Estimate for Plan Area B is an allowance for public infrastructure.

NPC = non-participating city

PFG = Potential Future Growth Area

- Could the potential alternative provide comprehensive species, natural community, and ecosystem conservation in the Plan Area?
- Could the potential alternative contribute to the recovery of endangered species in Placer County and northern California?
- Could the potential alternative establish a regional system of habitat reserves to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend?
- Could the potential alternative enhance and restore stream and riparian systems outside the habitat reserves to provide additional benefit to native fish and other stream-dwelling species?
- Could the potential alternative allow issuance of permits to the Permit Applicants for lawful incidental take of species listed as threatened or endangered pursuant to ESA and CESA?
- Could the potential alternative streamline and simplify the process for future incidental take authorization of currently nonlisted species that may become listed during the permit term?
- Could the potential alternative standardize avoidance, minimization, mitigation, and compensation requirements of all applicable laws and regulations relating to biological and

natural resources within the Plan Area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication?

- Could the potential alternative provide a less costly, more efficient project review process that would result in greater conservation than the current project-by-project, species-by-species endangered species compliance process?
- Could the potential alternative provide a means for the agencies receiving permits to extend the incidental take authorization to private entities subject to their jurisdiction, bringing endangered species permitting under local control?
- Could the potential alternative provide a streamlined aquatic resource protection and permitting process to provide the basis for streamlined USACE/CWA permitting and 1602 permitting for Covered Activities, as well as provide the basis for CWA Section 404 PGP for Covered Activities and a programmatic certification of the PGP by the Regional Water Quality Control Board under CWA Section 401?

Under the principles of both CEQA and NEPA, for an alternative to be advanced to the next tier of screening, the answer to most or all of these questions had to be *possibly* or *unknown*. If the answers to six or more of the questions were *not likely*, the potential alternative was rejected.

Four alternatives were eliminated from consideration at this first tier. A summary of the results of the screening is found in Table 4.

H. Habitat Conservation Plan/2081 Conservation Plan

While the HCP/2081 alternative would provide the same level of streamlining for the federal ESA compliance as an HCP/NCCP because the HCP components of the plan (federal covered species and conservation strategy) would likely be the same or similar, the HCP/2081 would not provide the same level of permit streamlining for state ESA compliance because fewer species (i.e., fully protected species) would be listed in this plan, and effects on some non-listed species would be handled outside of the HCP/2081 process, thus resulting in a less streamlined permitting process. For these reasons, this alternative would not provide a comprehensive plan meeting the project objective of protecting and enhancing ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.

J. No Programmatic General Permit, Letter of Permission, or Regional General Permit Issued by USACE

Although this alternative would include the conservation strategy of the PCCP, it would only consider effects on waters of the United States, including wetlands, on a project-by-project basis. Therefore, protection of wetlands would not be coordinated in the long term with conservation and management of species in the Plan area at a regional scale and the alternative would not make the process more predictable for future development. Because effects on waters of the United States, including wetlands, would be considered on a project-by-project basis such that coordination and standardization for mitigation and compensation requirements would not occur between ESA, CESA, NEPA, CEQA, the CWA, and other applicable laws and regulations related to biological and natural resources within the Plan Area this alternative would not provide a comprehensive plan meeting the project objective of protecting and enhancing ecological diversity and function, including aquatic

resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.

K. No Fill Alternative

Under this alternative, USACE would not permit any development that affects waters or wetlands of the United States as part of the PCCP. Covered Activities would not receive programmatic 404 permit coverage and the PCCP's conservation strategy would not serve as the Regional LEDPA described in the Corps' permitting strategy. Avoidance of all jurisdictional waters, including wetlands, within the Plan Area would be logistically and cost prohibitive. It would not govern public and private actions equally or consistently because the action would likely need to be modified depending on the type and extent of jurisdictional waters, including wetlands. This alternative would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA. 404 permit applications would be evaluated on a project-by-project basis separate from the PCCP' conservation strategy. For these reasons, this alternative would not provide a comprehensive plan meeting the project objective of protecting and enhancing ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.

L. Expanded Reserve Acquisition Area

As described above, the expansion of the RAA would reduce land available for development consistent with the general plans of the County and the City of Lincoln, and in particular, would reduce land available for new development by approximately half. This alternative would limit growth in portions of the Placer Vineyards Specific Plan and would not allow the proposed Placer Ranch Specific Plan or Brookfield projects to proceed. Portions of the Sunset Industrial Area are proposed for incorporation into the PCCP reserve. The stated growth objectives of the City of Lincoln are not accommodated with this reserve design. The coverage provided by this potential alternative would be inconsistent with the approved growth plans and development identified in applicant-approved plans or programmed projects in the Plan Area and the coverage of species would not "balance" growth, but actually reduce it. For these reasons, this alternative would not provide a comprehensive plan meeting the project objective of protecting and enhancing ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.

Second Tier Screening Criteria

Potential alternatives that advanced to the second tier of screening were evaluated under CEQA using the following question.

- Would the potential alternative avoid or substantially lessen any of the significant environmental effects of the proposed action?

There is no similar requirement under NEPA.

If the answer to the question was *possibly* or *unknown*, the potential alternative was carried forward for third tier screening. If the answer was *no* or *not likely*, then the potential alternative was rejected.

The following alternatives were carried forward to the third tier of screening.

- A. Reduction in Permit Term
- C. Increase in Permit Area
- D. Reduced Development/Reduced Fill—Map Alternative 2
- E. Reduced Development/Reduced Fill—Map Alternative 4
- F. Reduced Development/Reduced Fill—Map Alternative 6
- G. Reduced Development/Reduced Fill—Map Alternative 7

Third Tier Screening Criteria

The third tier criteria focus on CEQA's concept of feasibility and NEPA's principle of reasonableness. Under CEQA, alternatives evaluated in an EIR should be potentially feasible. CEQA Guidelines Section 15126.6(a) defines *feasible* as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. Under NEPA, an EIS must rigorously explore and objectively evaluate a reasonable range of alternatives that achieve the proposed action's objectives as provided by the purpose and need statement (40 CFR 1502.14[a]; 46 FR 18026).

The range of alternatives should provide a range of options to decision-makers to support informed decision-making. Reasonable alternatives include those that are practical or feasible from a technical or economic standpoint and using common sense, rather than alternatives that are simply desirable from the applicant's perspective. Under both NEPA and CEQA, potential alternatives can be developed using economic considerations, social factors, legal feasibility under species protection laws, and technical factors to inform the general concepts of feasibility under CEQA and reasonableness under NEPA. The Section 404(b)(1) analysis must consider similar issues to those under CEQA and NEPA. These include costs, logistics, existing technology, and overall purpose.

In addition to these CEQA and NEPA considerations, adverse effects on the aquatic environment, including effects on waters of the United States and special aquatic sites, must be evaluated by USACE consistent with the requirements of the Section 404(b)(1) guidelines. Third tier criteria include the following issues.

- Would the marginal costs of the potential alternative be so substantial that a reasonably prudent public agency would not proceed with the alternative?
- Would the marginal costs of the potential alternative be so substantial that it would be impractical to proceed with the alternative?
- Would the potential alternative take so long to implement, as compared with the proposed action, that it would not meet the project purpose or objectives within an acceptable time frame?
- Would the potential alternative require technology or physical components that are clearly technically infeasible based on currently available science and engineering for the scope of the potential alternative?
- Would construction, operation, and/or maintenance of the potential alternative violate any federal or state statutes or regulations?

- Would the potential alternative involve an outcome that is clearly undesirable from a policy standpoint in that the outcome could not reflect a reasonable balancing of relevant economic, environmental, social, and technological factors?
- Would the potential alternative involve a potential increase in adverse effects on the aquatic ecosystem?
- Would the potential alternative involve a potential increase in adverse effects on special aquatic sites?

If the answers to all these questions were *no*, *not likely*, or *unknown*, the potential alternative is recommended for consideration in the EIS/EIR. If the answers to any of these questions were *likely* or *yes*, the potential alternative failed the third tier screening and, consequently, is not recommended for consideration in detail in the EIS/EIR.

Alternatives Identified through the Screening Process

Based on the three-tiered screening process, described above and summarized in Tables 4–6 at the end of this memorandum, the following alternatives were identified as those to be analyzed in the EIS/EIR.

- Alternative 1—No Action.
- Alternative 2—Proposed Action.
- Alternative 3—Reduced Take/Reduced Fill.
- Alternative 4—Reduced Permit Term.

Expanded draft descriptions of Alternatives 3 and 4 are presented below. Alternative 3—Reduced Take/Reduced Fill is a combination of Alternatives D, E, F, and G. Descriptions of Alternative 1—No Action and of Alternative 2—Proposed Action were previously reviewed by the Resource Agencies and are not included below.

Expanded Description of Action Alternatives

The following two action alternatives are proposed for inclusion in Section 2.4, *Alternatives Carried Forward for Detailed Analysis*, of the EIS/EIR and used as the basis for the environmental analysis in the EIS/EIR. These action alternatives would be in addition to Alternative 1—No Action and Alternative 2—Proposed Action.

Alternative 3—Reduced Take/Reduced Fill

Alternative 3—Reduced Take/Reduced Fill is derived from the second tier alternatives screening process evaluation of Alternatives D, E, F, and G. These alternatives are based on different versions of a conservation and development map originally considered in 2005 during an early phase of the PCCP planning process (Map Alternatives 2, 4, 6, and 7, described above), which examined different boundaries for reserve acquisition in the western area of the Valley portion of the Plan Area. As a group, these maps were considered to be a basis for developing a proposed plan, as acknowledged by the USACE/USEPA) letter dated August 24, 2007.

Compared with Alternative 2, the proposed action, the conservation principle of the earlier maps is essentially equivalent in the Foothills, but it differs mainly in the balance between the RAA and PFG in the Valley. The four maps all have a smaller amount of land designated PFG in the Valley, ranging from a reduction of 13% for Map 6 to a reduction of 5% for Map 4 (Table 2).

Table 2. Designations in the Valley under the Proposed PCCP and Map Alternatives 2, 4, 6, and 7 (acres)

PCCP Designation	Proposed Plan	Map 2	Map 4	Map 6	Map 7
EXR	9,854	9,855	9,855	9,855	9,855
PFG	46,949	43,238	44,552	40,629	43,187
RAA	44,104	47,814	46,500	50,423	47,865
Plan Area A	100,907	100,907	100,907	100,907	100,907
PFG % reduction/increase from Proposed Plan		-8%	-5%	-13%	-8%

The 10-year planning process subsequent to the 2007 letter responded to input from stakeholders' advisory groups, land owners, wildlife agencies, USACE, USEPA, and the Permit Applicants. This input resulted in changes in the identification of parcel suitability for conservation and development, which led to the development of the proposed Plan. The City of Lincoln adopted a new general plan on March 25, 2008, with a consequent expansion of its sphere of influence. Additionally, in 2009, the vegetative land cover database was updated, which resulted in significant changes to the mapping of the location and size of vernal pool complexes in the Valley. The updated vernal pool complex mapping was initiated after a science advisory review panel provided input on mapping criteria for vernal pool complexes. Map Alternatives 2, 4, 6 and 7 were based upon the earlier and now outdated version of the vegetative land cover data, which were agreed by the Permit Applicants and the Resource Agencies to be less accurate than the updated data and maps. For these reasons, no single map and no spatial composite, or average, of the four maps of Alternatives D, E, F, and G represents an implementable alternative to the proposed action.

Although the specific geography of the earlier maps and their associated alternatives no longer met the purpose and need of the proposed Plan, their conservation concepts remain valid. The common quantitative feature among these alternatives is a reduced PFG, ranging from roughly 2,000 to 6,000 fewer acres of PFG. This reduction in PFG could also result in a reduction of effects on natural communities, including vernal pool complex lands, and reduction in fill of wetlands and other waters of the United States.

The PCCP uses a 50-year growth scenario to set the approximate scale of future land development as a Covered Activity; the proposed action subject to the EIS/EIR does itself not propose future development—rather it proposes the conditions that would apply to future development so as to avoid, minimize, and mitigate effects on Covered Species, effects on natural communities, and fill of waters.

A key permit condition of the proposed PCCP is the overall limits of take allowable during the permit term. These limits are set forth in the proposed PCCP in the Plan as Table 4-1. The intent in developing alternatives for evaluation in the EIS/EIR, including Alternatives D, E, F, and G, is to reduce impacts, not to reduce development *per se*. In comparing these alternatives to the proposed PCCP, the larger RAA that is included in each of them would have the effect of reducing development

potential and, accordingly, reducing impacts on vernal pool complex lands by 5–10%; these alternatives can be represented by an alternative permit that sets lower limits for loss of vernal pools and other aquatic wetland habitats. These lower take limits can apply to the same RAA/PFG map that emerged from the Permit Applicants' stakeholder process and which serves as the basis for the proposed PCCP. Lower limits would require greater avoidance of vernal pool complex lands and would be accomplished by greater onsite avoidance, greater acquisition of reserve lands in the PFG, and/or reduced land development to accommodate increases in housing and economic activity in the Plan Area.

Alternative 3 can be evaluated quantitatively without developing a specific alternative map that differs from the proposed Plan. To do so, spatial analysis conducted for the proposed PCCP was used, setting permit limits for loss of vernal pools and other aquatic wetland habitats at roughly 8–10% lower than for the proposed PCCP.

The effect of reduced take limits was evaluated by the spatial model of the Plan Area used by the Permit Applicants in the planning process to evaluate alternatives and to estimate the effect of Covered Activities, including land development as represented by a 50-year growth scenario. Under Alternative 3, vernal pool complex land conversion is reduced for the Valley PFG by 10% (about 1,250 acres) as compared to the proposed action; there are similar reductions in other communities associated with wetlands or other waters. When the spatial model assumes those land cover types are not available for land development by Covered Activities, the model reallocates future land development to other land cover types, resulting in a corresponding increase in conversion of some of the other natural community types. In order to minimize the impact on non-wetland associated communities, the total extent of land conversion in the Valley PFG is reduced for this alternative by 1,000 acres, compared to the proposed Plan. This limits increased conversion of non-wetland associated communities to less than 5%, as shown in Table 3.

Table 3. Alternative 3—Reduced Take/Reduced Fill Permit Limits for Direct Effects and Comparison with Proposed Plan

	PCCP Proposed Plan			Alternative 3 Reduced Take/Reduced Fill			Reduction/In crease in Valley PFG from Proposed PCCP
	All Plan	Valley PFG	All Valley	All Plan	Valley PFG	All Valley	
Communities and Constituent Habitats							
Vernal Pool Complex	12,550	12,200	12,400	11,300	10,950	11,150	-10%
Vernal Pool Constituent Habitats Total	580	560	570	525	505	515	-10%
Vernal Pool	185	180	180	165	160	160	-11%
Seasonal Wetland in Vernal Pool Complex	223	220	220	198	195	195	-11%
Seasonal Swales	172	170	170	152	150	150	-12%
Vernal Pool Complex Uplands	11,970	11,640	11,830	10,775	10,445	10,635	-10%
Grassland	6,900	3,400	3,500	7,040	3,540	3,640	+4%
Aquatic/Wetland Complex	260	120	120	250	110	110	-9%
Aquatic/Wetland Constituent Habitats Total	260	120	120	250	110	110	-9%
Fresh Emergent Marsh	105	50	50	100	45	45	-10%
Lacustrine	103	50	50	99	46	46	-8%
Non-Vernal Pool Seasonal Wetland Complex Uplands	52 -	20 -	20 -	50 -	18 -	18 -	-8%
Riverine/Riparian Complex	490	150	150	475	135	135	-10%
Riverine/Riparian Constituent Habitats Total	490	150	150	475	135	135	-10%
Riverine Type	115	80	80	106	71	71	-11%
Riparian Woodland Complex Uplands	375 -	70 -	70 -	369 -	64 -	64 -	-9%
Valley Oak Woodland	140	30	30	140	30	30	0%
Oak Woodland	6,210	1,100	1,100	6,225	1,115	1,115	+1%
Subtotal Natural	26,550	17,000	17,300	25,430	15,880	16,180	-7%
Agriculture	3,550	2,700	2,900	3,670	2,820	3,020	+4%
Rice	2,060	1,800	2,000	2,140	1,880	2,080	+4%
Any Agriculture	1,490	900	900	1,530	940	940	+4%
Total All	30,100	19,700	20,200	29,100	18,700	19,200	-5%

Source: Placer County, December 2017

Effect of Reduced Take/Reduced Fill on Land Availability

The Permit Applicants' project objectives include the ability for Covered Activities to proceed in accordance with adopted plans, policies and programs. The Covered Activities include urban and rural land development to accommodate increases in population and employment, and a variety of road, water, and other needed infrastructure construction and maintenance activities. During the HCP/NCCP planning process, the extent and location of likely urban and rural development in western Placer was modeled by a growth scenario. Its purpose was to define the amount of housing and employment growth and corresponding land development area likely needing to be accommodated in the 50-year permit term. As with other planning parameters such as land cover mapping and Covered Species occurrences, the same growth scenario is assumed for all alternatives.

The housing and employment growth and corresponding land development projections prepared for the purposes of the PCCP represent one possible scenario for long-term growth in western Placer County, assuming continuation of long-term regional growth trends and planned development patterns. The scenario reflects future economic and population growth potential for Placer County and the cities in the western portions of the county and assessment of development plans and proposals under consideration in Placer County and the cities as of April 2015, when the projections were made. Among other factors, endangered species regulations, treated water distribution, transportation costs, climate change, and potential market responses to those changes will alter the 50-year growth scenario.

The amount of land development under the proposed PCCP does not represent buildout of the development capacity in the Valley PFG. There are about 8,000 more acres of development potential under the general plans and specific plans of Placer County and the City of Lincoln than is projected to occur under the 50-year growth scenario.

Therefore, assuming the same density of development, reducing the development footprint away from vernal pool complex lands during the 50-year permit term would likely shift development to other parts of the Valley within the PFG. Assuming no increase in development density, in the longer term, a reduced development footprint in the Valley would reduce the housing, population, and jobs accommodated at buildout sometime beyond the 50-year permit term. Under this scenario, the differences in effects on habitat and species would depend on the characteristics of the land remaining in the PFG. This is illustrated by the results of the spatial model analysis of direct effects in Table 3.

Other changes in development patterns would limit the effects on the amount of growth accommodated in the Valley. In both unincorporated Placer County and the city of Lincoln, the development capacity for non-residential land use exceeds reasonable employment growth projections by a larger margin than does the development capacity for residential land use. Some areas currently designated for non-residential development are likely to instead be developed with residential land use over the longer term. This change from non-residential development to residential is consistent with trends over the past 40 years. In addition, market forces and changes in State housing law will likely result in an increase in the amount of higher density development in western Placer County. Higher density development patterns would accommodate more housing, population, and employment on any given amount of land, thereby allowing similar amount of population growth and economic activity as expected under the proposed Plan.

The approximate 10% reduction in vernal pool complex land conversion assumed for Alternative 3 reduces the overall availability of land for development. This does not necessarily force a change in actual patterns of development; part of the reduced take for Alternative 3 could be accommodated by increased onsite avoidance. The reduced take/reduced fill constraint on wetland communities is likely to reduce the overall amount of development land available in the Valley PFG by approximately 1,000 acres. This likely effect was used in formulating Alternative 3, reducing the total extent of land conversion by 1,000 acres so as to minimize impacts of displaced development on non-wetland communities.

Plan Area

Plan Area A

A1—Valley Potential Future Growth Area

The reduced permit limits of Alternative 3 would apply only to Plan Area component A1, Valley PFG. Because Alternative 3 would incorporate the same map of reserves as the proposed action in order to retain feasibility with respect to the objectives of the Permit Applicants, the character and pattern of development would be modified slightly in order for the full amount of housing and employment growth in the growth scenario to be accommodated in the 50-year permit term. This would entail either increased onsite avoidance of vernal pool complex and other wetlands and waters, increased acquisition of reserve lands in the PFG, and/or reduced development footprint in the Valley PFG. The intra-regional shifts in development and the net reduction of 1,000 acres of land conversion—approximately 5%—could be accommodated by the land use diagrams and corresponding range of development densities in the adopted City and County general plans.

A2—Valley Conservation and Rural Development

Under Alternative 3, no change would occur to the mapped area or the permit limits that would apply to component A2, Valley Conservation and Rural Development. There may be changes in the extent of the PCCP Reserve System established there.

A3—Foothills Potential Future Growth Area

The extent of component A3, Foothills PFG, under Alternative 3 would be the same as under the proposed action.

A4—Foothills Conservation and Rural Development

The extent of component A4, Foothills Conservation and Rural Development, under Alternative 3 would be the same as under the proposed action.

Plan Area B

Activities in Plan Area B, comprising the components listed below, would be the same under Alternative 3 as under the proposed action.

- B1—Permit Applicant Activity in Non-Participating Cities
- B2—PCWA Operations and Maintenance
- B3—Coon Creek Floodplain Conservation

- B4—Fish Passage Channel Improvement
- B5—Big Gun Reserve

The County would be the main Permittee operating in component B1 and could alter public project design to reduce conversion of vernal pool complex or other wetlands in order to manage the overall reduced permit limits set in Alternative 3.

Covered Activities

Covered Activities under Alternative 3 would be the same as under the proposed action. As discussed above, the extent and location of covered growth may be changed slightly.

Covered Species

The same species would be covered under Alternative 3 as under the proposed action.

Conservation Strategy

Under this alternative, the conservation strategy and its components, designed to provide for conservation of landscapes, natural communities, and Covered Species, would be the same under Alternative 3 as under the proposed action.

Implementing Alternative 3 by relying on greater onsite avoidance would produce an appreciable change in the component of the conservation strategy that relies on establishing a regional scale Reserve System rather than a continuation of the present pattern of preserving smaller, isolated patches of habitat that are more difficult to manage and inevitably subject to greater indirect effects of adjacent land uses.

The increased avoidance in the Valley PFG and the decreased mitigation dependent on effect, and the possibly smaller extent of land conversion overall would likely result in a smaller and potentially less contiguous reserve area to be acquired in the RAA. The decrease would depend on the way the reduced take/reduced fill for Alternative 3 was implemented in the Valley PFG; for the purposes of evaluating effects of Alternative 3, it is assumed that the extent of the Reserve System in the Valley RAA would probably be reduced by 3,000 acres from that assumed for implementation of the proposed action, and the extent of Reserve System in the Valley PFG would probably be increased by approximately 2,000 acres from that assumed for implementation of the proposed action.

PCCP Implementation

Plan

Plan implementation would follow the same principles and adhered to the same requirements under Alternative 3 as under the proposed action.

CARP

Implementation of the *Western Placer County Aquatic Resources Program* (CARP) under Alternative 3 would be identical to that under the proposed action.

Alternative 4—Reduced Permit Term

Under this alternative, the HCP/NCCP would include the same permit conditions for Covered Activities and similar conservation measures and conservation strategy as the PCCP, except the permit term would be for 30 years instead of 50.

Plan Area

The Plan Area would be the same as under the proposed action.

Covered Activities

Because of the shorter permit term, longer-term projects would not be covered. Additionally, there would be lower levels of urban and suburban development covered under the HCP/NCCP. Because of reduced impacts on Covered Species, the amount of conservation proposed would be less than the proposed action, generally in proportion to the lower level of development. Finally, it is expected that less funding would be needed for acquisition, management, and restoration of a lesser amount of conservation lands (i.e., a smaller Reserve System).

For the purposes of the analysis, it is assumed that under Alternative 4, the amount of total impacts of Covered Activities would be reduced by 40%, the same proportional reduction as the permit term (from 50 years to 30 years).

Covered Species

The Covered Species would be the same as under the proposed action.

Conservation Strategy

The conservation strategy needed to offset those impacts (i.e., mitigate) and provide for the conservation and management of the Covered Species has not been determined. However, for the purposes of this analysis, it is assumed under this alternative that the Reserve System would be 30% smaller than under the proposed action.

Under Alternative 4, the conservation actions proposed in the Plan (i.e., Alternative 2) would be proportional to the amount of development by year 30 under Alternative 2. Accordingly, the conservation proposed under the PCCP would be reduced for the Valley portion of Plan Area A, Foothill portion of Plan Area A, and for Plan Area B by multiplying those amounts by 0.55, 0.60, and 0.95, respectively.

PCCP Implementation

Alternative 4 would entail implementation of the PCCP as under Alternative 2, the proposed action, except that the permit term would be 30 years instead of 50, resulting in less urban and suburban development within the permit term. The impacts by year 30—as shown in Table 2-5 in the Plan, *Land Development to Accommodate Growth for the 50-year Permit Term by 10-year Period (acres)*—were used as the estimate of impacts under Alternative 4. As shown in this table, land development at year 30 for the Valley and Foothill portions of Plan Area A would be 55% and 60%, respectively, of those estimated by year 50. For Plan Area B, land development at year 30 would be 95% of that estimated by year 50. The individual impacts under Alternative 4 were developed by multiplying

these percentages (the fractions) by the total impacts on natural communities, agricultural lands, and Covered Species under Alternative 2.

Table 4. First Tier Screening of Alternatives to PCCP

Potential Alternatives	First Tier Screening Criteria											Score (# of Unknown or Possibility)	Carried Forward to Second Tier Screening?
	Protect and enhance biological and ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.	Provide comprehensive species, natural community, and ecosystem conservation in the Plan Area	Contribute to the recovery of endangered species in Placer County and northern California.	Establish a regional system of habitat reserves to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend.	Allow issuance of permits to the Permit Applicants for lawful incidental take of threatened or endangered species pursuant to ESA and CESA.	Enhance and restore stream and riparian systems outside the habitat reserves to provide additional benefit to native fish and other stream-dwelling species.	Streamline and simplify the process for future incidental take authorization of currently nonlisted species that may become listed during the permit term.	Standardize avoidance, minimization, mitigation, and compensation requirements of all applicable laws and regulations relating to biological and natural resources within the Plan Area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication.	Provide a less costly, more efficient project review process that would result in greater conservation than the current project-by-project, species-by-species endangered species compliance process.	Provide a means for the agencies receiving permits to extend the incidental take authorization to private entities subject to their jurisdiction, bringing endangered species permitting under local control.	Provide a streamlined aquatic resource protection and permitting process to provide the basis for streamlined USACE/CWA permitting and 1602 permitting for Covered Activities, as well as provide the basis for CWA Section 404 PGP for Covered Activities and a programmatic certification of the PGP by the Regional Water Quality Control Board under CWA Section 401.		
<i>A. Reduction in Permit Term to 30 Years</i>	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	11	Yes
<i>B. Reduction in Covered Species</i>	Possibly. Habitat requirements for non-covered special-status species would not directly be provided and any habitat benefits non-covered species received from covered species habitat conservation would be ancillary. Thus, this alternative would not provide for long-term conservation and management in the Plan Area at a regional scale.	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	11	Yes
<i>C. Increase in Permit Area</i>	Possibly, although the participation of the other cities in the county cannot be required, and the cities other than Lincoln have chosen not to participate.	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	11	Yes
<i>D. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map 2</i>	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA within the Plan Area.	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	10	Yes
<i>E. Reduced Development Reduced Impacts to Jurisdictional Wetlands</i>	Not likely because it would not allow for land uses and	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Unlikely. This alternative would not allow the proposed Placer Ranch	Possibly	Possibly	Possibly	9	Yes

First Tier Screening Criteria														
Potential Alternatives	Protect and enhance biological and ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.	Provide comprehensive species, natural community, and ecosystem conservation in the Plan Area	Contribute to the recovery of endangered species in Placer County and northern California.	Establish a regional system of habitat reserves to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend.	Allow issuance of permits to the Permit Applicants for lawful incidental take of species listed as threatened or endangered pursuant to ESA and CESA.	Enhance and restore stream and riparian systems outside the habitat reserves to provide additional benefit to native fish and other stream-dwelling species.	Streamline and simplify the process for future incidental take authorization of currently nonlisted species that may become listed during the permit term.	Standardize avoidance, minimization, mitigation, and compensation requirements of all applicable laws and regulations relating to biological and natural resources within the Plan Area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication.	Provide a less costly, more efficient project review process that would result in greater conservation than the current project-by-project, species-by-species endangered species compliance process.	Provide a means for the agencies receiving permits to extend the incidental take authorization to private entities subject to their jurisdiction, bringing endangered species permitting under local control.	Provide a streamlined aquatic resource protection and permitting process to provide the basis for streamlined USACE/CWA permitting and 1602 permitting for Covered Activities, as well as provide the basis for CWA Section 404 PGP for Covered Activities and a programmatic certification of the PGP by the Regional Water Quality Control Board under CWA Section 401.	Score (# of Unknown or Possibility)	Carried Forward to Second Tier Screening?	
and Other Waters of the United States—Map 4	development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA within the Plan Area.							Specific Plan or Brookfield projects to proceed. Portions of the Sunset Industrial Area are proposed for incorporation into the PCCP reserve. The City of Lincoln was not in favor of this alternative, as it restricts the City of Lincoln's stated land use objectives. Therefore, the coverage provided by this potential alternative would be inconsistent with the approved growth plans and development identified in applicant-approved plans or programmed projects in the Plan Area, and the coverage of species would not "balance" growth, but actually reduce it.						
F. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States —Map 6	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA within the Plan Area.	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	While growth is accommodated in the Regional University Specific Plan and the Curry Creek Community Plan areas, this alternative limits growth in portions of the Placer Vineyards Specific Plan area and completely removes urban growth in the Placer Ranch Specific Plan area and within the Brookfield project site. Some growth objectives of the City of Lincoln are accommodated in this reserve design. Therefore, the coverage provided by this potential alternative would be inconsistent with the approved growth plans and development	Possibly	Possibly	Possibly	9	Yes	

First Tier Screening Criteria													
Potential Alternatives	Protect and enhance biological and ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.	Provide comprehensive species, natural community, and ecosystem conservation in the Plan Area	Contribute to the recovery of endangered species in Placer County and northern California.	Establish a regional system of habitat reserves to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend.	Allow issuance of permits to the Permit Applicants for lawful incidental take of species listed as threatened or endangered pursuant to ESA and CESA.	Enhance and restore stream and riparian systems outside the habitat reserves to provide additional benefit to native fish and other stream-dwelling species.	Streamline and simplify the process for future incidental take authorization of currently nonlisted species that may become listed during the permit term.	Standardize avoidance, minimization, mitigation, and compensation requirements of all applicable laws and regulations relating to biological and natural resources within the Plan Area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication.	Provide a less costly, more efficient project review process that would result in greater conservation than the current project-by-project, species-by-species endangered species compliance process.	Provide a means for the agencies receiving permits to extend the incidental take authorization to private entities subject to their jurisdiction, bringing endangered species permitting under local control.	Provide a streamlined aquatic resource protection and permitting process to provide the basis for streamlined USACE/CWA permitting and 1602 permitting for Covered Activities, as well as provide the basis for CWA Section 404 PGP for Covered Activities and a programmatic certification of the PGP by the Regional Water Quality Control Board under CWA Section 401.	Score (# of Unknown or Possibility)	Carried Forward to Second Tier Screening?
								identified in applicant-approved plans or programmed projects in the Plan Area, and the coverage of species would not "balance" growth, but actually reduce it.					
<i>G. Reduced Development/ Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map 7</i>	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA within the Plan Area.	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	This alternative was found to accommodate all of the proposed specific plan applications under consideration in the county at the time of development of these alternatives, portions of the Curry Creek Community Plan area, and all of the Sunset Industrial Area. However, the stated growth objectives of the City of Lincoln are not accommodated with this reserve design. Therefore, the coverage provided by this potential alternative would be inconsistent with the approved growth plans and development identified in applicant-approved plans or programmed projects in the Plan Area, and the coverage of species would not "balance" growth, but actually reduce it.	Possibly	Possibly	Possibly	9	Yes
<i>H. Habitat Conservation Plan/2081 Conservation Plan</i>	Not likely. This alternative would not provide a comprehensive plan.	Not likely. This alternative would not provide a comprehensive plan.	Not likely. This alternative would not provide a comprehensive plan.	Not likely. This alternative would not provide a comprehensive plan.	Not likely. This alternative would not provide a comprehensive plan.	Not likely. This alternative would not provide a comprehensive plan.	Not Likely. While the HCP/2081 would provide the same level of streamlining for the federal ESA compliance as an HCP/NCCP because the HCP components of the plan (federal covered species and conservation strategy) would likely be the same or similar, the	Possibly	Not likely. Fewer species would be covered.	Not likely. Fewer species would be covered.	Not likely. Fewer species would be covered.	1	No, because it does not meet the project objectives.

First Tier Screening Criteria													
Potential Alternatives	Protect and enhance biological and ecological diversity and function, including aquatic resource functions and values, in the greater portion of western Placer County while allowing appropriate and compatible growth in accordance with applicable laws.	Provide comprehensive species, natural community, and ecosystem conservation in the Plan Area	Contribute to the recovery of endangered species in Placer County and northern California.	Establish a regional system of habitat reserves to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend.	Allow issuance of permits to the Permit Applicants for lawful incidental take of species listed as threatened or endangered pursuant to ESA and CESA.	Enhance and restore stream and riparian systems outside the habitat reserves to provide additional benefit to native fish and other stream-dwelling species.	Streamline and simplify the process for future incidental take authorization of currently nonlisted species that may become listed during the permit term.	Standardize avoidance, minimization, mitigation, and compensation requirements of all applicable laws and regulations relating to biological and natural resources within the Plan Area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication.	Provide a less costly, more efficient project review process that would result in greater conservation than the current project-by-project, species-by-species endangered species compliance process.	Provide a means for the agencies receiving permits to extend the incidental take authorization to private entities subject to their jurisdiction, bringing endangered species permitting under local control.	Provide a streamlined aquatic resource protection and permitting process to provide the basis for streamlined USACE/CWA permitting and 1602 permitting for Covered Activities, as well as provide the basis for CWA Section 404 PGP for Covered Activities and a programmatic certification of the PGP by the Regional Water Quality Control Board under CWA Section 401.	Score (# of Unknown or Possibility)	Carried Forward to Second Tier Screening?
							HCP/2081 would not provide the same level of permit streamlining for state ESA compliance because fewer species (i.e., fully protected species) would be listed in this plan and effects on some non-listed species would be handled outside of the HCP/2081 process, thus resulting in a less streamlined permitting process.						
I. Reserve System Limited to Placer County	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	11	Yes
J. No PGP, LOP, or RGP Issued by USACE	Not likely. Although it would include the conservation strategy of the PCCP, it would only consider effects on waters of the United States, including wetlands, on a project-by-project basis. Therefore, protection of wetlands would not be coordinated in the long term with conservation and management of species in the Plan area at a regional scale.	Possibly	Possibly	Possibly	Possibly	Possibly	Not likely because effects on waters of the United States, including wetlands, would be considered on a project-by-project basis such that associated mitigation would not be integrated into the PCCP Reserve System and would not make the process more predictable for future development.	Not likely because effects on waters of the United States, including wetlands, would be considered on a project-by-project basis such that coordination and standardization for mitigation and compensation requirements would not occur between ESA, CESA, NEPA, CEQA, the CWA, and other applicable laws and regulations related to biological and natural resources within the Plan Area.	Not likely because effects on waters of the United States, including wetlands, would only be considered on a project-by-project basis and thus no programmatic wetlands permit could be issued as the projects would be treated individually.	No	Not likely because effects on waters of the United States, including wetlands, would only be considered on a project-by-project basis and thus no programmatic wetlands permit could be issued as the projects would be treated individually.	5	No
K. No Fill	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA, as USACE would not permit any	Possibly	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA, as USACE would not permit any	Possibly	Possibly	Possibly	Not likely because it would not allow for land uses and development as specified under the approved general plans of Placer County and the City of Lincoln, nor planned and programmed projects of SPRTA and PCWA, as USACE would not permit any development that affects waters or wetlands of the United States.	Not likely because avoiding all jurisdictional waters, including wetlands, would be logistically and cost prohibitive. It would not govern public and private actions equally or consistently because the action would likely need to be modified depending on the type and extent of jurisdictional waters,	Possibly	No	Not likely because no permits would be issued.	5	No

Table 5. Second Tier Screening of Alternatives to PCCP

Potential Alternatives	Second Tier Screening Criteria		Score (# of Unknown or Possibility)	Carried Forward to Third Tier Screening?
	<i>Avoid or substantially lessen any of the significant environmental effects of the proposed action.</i>			
<i>A. Reduction in Permit Term to 30 Years</i>	Unknown. A reduction in the permit term would mean that in the long term, coordinated planning for conservation would not continue. This could result in significant environmental effects on species of special status or concern. It is unknown whether this potential alternative would avoid or substantially lessen any of the significant environmental effects of the proposed action.		1	Yes
<i>B. Reduction in Covered Species</i>	Not likely because a reduction in Covered Species, while maintaining the Covered Activities identified in the proposed action, could result in significant environmental effects on species of special status or concern. These effects would not be offset by the conservation strategy or conservation lands established because they would not include these types of species. Therefore, it is not expected this potential alternative would avoid or substantially lessen any of the significant environmental effects of the proposed action.		0	No
<i>C. Increase in Permit Area</i>	Unknown because while there would be an increase in the permit area to include areas in the other incorporated cities, it would also increase the type and number of Covered Activities. Therefore, it is unknown whether this potential alternative would avoid or substantially lessen any of the significant environmental effects of the proposed action.		1	Yes
<i>D. Reduced Development/ Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 2</i>	Possibly. Reduced development could reduce effects on Covered Species.		1	Yes
<i>E. Reduced Development/ Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 4</i>	Possibly. Reduced development could reduce effects on Covered Species.		1	Yes
<i>F. Reduced Development/ Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 6</i>	Possibly. Reduced development could reduce effects on Covered Species.		1	Yes
<i>G. Reduced Development/ Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 7</i>	Possibly. Reduced development could reduce effects on Covered Species.		1	Yes
<i>I. Reserve System Limited to Placer County</i>	Unlikely		0	No

Table 6. Third Tier Screening of Alternatives to PCCP

Potential Alternatives	Third Tier Screening Criteria							Score (# of Likely or Yes)	Carried Forward to Analysis in EIS/EIR?
	<i>Substantial marginal costs compared to those of the proposed action such that a reasonably prudent public agency would not proceed with, or it would be impracticable to proceed with, the potential alternative.</i>	<i>Substantial implementation time compared with that of the proposed action would result in the potential alternative not meeting the project purpose or objectives within an acceptable time frame.</i>	<i>Technology or physical components required would be clearly technically infeasible.</i>	<i>Construction, operation, and/or maintenance of the potential alternative would violate any federal or state statutes or regulations.</i>	<i>Outcomes could be clearly undesirable from a policy standpoint.</i>	<i>Would the potential alternative involve an increase in adverse impacts to waters of the United States?</i>	<i>Would the potential alternative involve an increase in adverse impacts to special aquatic sites?</i>		
<i>A. Reduction in Permit Term to 30 Years</i>	No	No	No	No	No	Likely	Likely	2	Yes
<i>C. Increase in Permit Area</i>	No	Infeasible, as other jurisdictions have not chosen to participate, even given a substantial amount of time to consider participation. And there is no growth.	No	No	Yes	Yes	Yes	3	No
<i>D. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 2</i>	No	No	No	No	No	No	No	0	Yes ¹
<i>E. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 4</i>	No	No	No	No	No	No	No	0	Yes
<i>F. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States —Map Alternative 6</i>	No	No	No	No	No	No	No	0	Yes
<i>G. Reduced Development/Reduced Impacts to Jurisdictional Wetlands and Other Waters of the United States—Map Alternative 7</i>	No	No	No	No	No	No	No	0	Yes

Note:

¹ Alternatives D, E, F, and G combined for analysis in the EIS/EIR as Alternative 3—Reduced Take/Reduced Fill.

EIS/EIR = environmental impact statement/environmental impact report.

PCCP = Placer County Conservation Program.



MEMORANDUM

Date: March 14, 2018

To: Gregg McKenzie, PCCP Program Administrator

From: Sally Nielsen

Subject: **Implications of Alternative L. Expanded Reserve Acquisition Area for the Land Development under the PCCP**

Overview of Alternative L. Expanded Reserve Acquisition Area

Alternative L expands the bounds of the Reserve Acquisition Area (RAA) to include all areas designated as RAA in the map alternatives considered during PCCP development. The result is fewer acres within the Potential Future Growth (PFG) area where new urban and suburban development would be a covered activity under the Proposed PCCP. All of the changes would be in the Valley subarea. Table 1 presents the comparison of land designations under the Proposed PCCP and Alternative L.

Table 1. Comparison of Valley Land Designations under the Proposed PCCP and Alternative L. Expanded Reserve Acquisition Area

	Potential Future Growth (PFG)				Total Valley Land Area
	Existing Protected Areas (EXR)	Existing Developed Areas	PFG for new development	Reserve Acquisition Area (RAA)	
Proposed PCCP	9,854	17,050	29,899	44,104	100,907
Alternative L - Expanded RAA	9,854	17,050	13,197	60,806	100,907
Difference	-		(16,702)	16,702	-

Source: MIG|TRA and *Draft Placer County Conservation Plan*, Table 2-1. Existing Land Use in Western Placer County.

Alternative L would expand the RAA and contract the PFG, changing the designations by about 17,000 acres for each category. Note that the PFG consists of existing developed areas as well as areas identified for future urban and suburban development in the approved general plans and specific plans of Placer County and the City of Lincoln. Within the total of 46,949 acres designated Valley PFG in the Proposed PCCP, about 17,000 acres are already developed with urban/suburban (12,107 acres) and rural residential (4,943 acres) land use (see Table 2-1. Existing Land Use in Western Placer County). This leaves about 29,000 acres in the Valley PFG under the Proposed PCCP that City and County land use plans and zoning designate for future urban and suburban development.

With some relatively minor exceptions, it appears that the Expanded RAA does not cover areas of existing development. Consequently, all of the impact of the Alternative L change in designation occurs in areas of the Proposed PCCP PFG that are planned and zoned to accommodate new urban and suburban development according to plans of the City of Lincoln and Placer County. With only 13,200 acres in the Valley PFG to accommodate new development, Alternative L reduces the Valley PFG by more than 50 percent (56 percent). Compared to the Proposed PCCP, only 44 percent of the future planned development potential in the City of Lincoln and unincorporated Western Placer County would be categorized as covered activity under the PCCP. Another almost 17,000 acres of land planned to accommodate future new development and associated infrastructure would be categorized within the Reserve Acquisition Area. This development potential as well as components of PCWA and SPRTA projects would not qualify as covered activity under the PCCP.

Generally, for most new development and infrastructure projects, being treated as a covered activity offers benefits that reduce the costs, uncertainty, and risk associated with compliance with endangered species and Clean Water Act regulation during the development process. Benefits include a predictable and streamlined regulatory compliance process, predictable costs, and standardized avoidance, minimization, mitigation, and compensation requirements.

Implications for land development and accommodating population and employment growth in Western Placer County

The 50 year growth scenario for the PCCP describes likely future demand for urban and suburban development in western Placer County based on national, state, and regional economic analysis and evaluation of City and County development plans. The growth scenario is described in Appendix M of the Public Review Draft PCCP. According to that scenario, about 20,000 acres of land (19,545 acres) would be developed in the Valley PFG to accommodate population and employment growth in Western Placer County during the 50-permit term (see Table 2-5. Land Development to Accommodate Growth for the 50-year Permit Term by 10-year Period). As noted in the Public Review Draft PCCP (see Appendix M. *Growth Scenario Memo*), the Valley PFG does not reach buildout during 50-year permit term.

Expanding the RAA as proposed under Alternative L does not change the market factors underlying the PCCP growth scenario. Furthermore, as noted above, Alternative L would not reduce the number of acres designated for future urban and suburban development in Placer County and City of Lincoln approved plans and zoning nor would it reduce the planned scope of SPRTA and PCWA projects.

Development under local approved plans and infrastructure projects that might be pursued in Alternative L's expanded RAA, could be permitted under the current Section 7 endangered species and Section 404 Waters of the U.S. regulatory compliance processes. In most cases, this would entail higher development costs than under the Proposed PCCP, in terms of both time and money.

Some potential consequences of Alternative L for the balance of land development and conservation in Western Placer County are as follows:

- ◆ Under the 50-year growth scenario, the land designated for urban development in Western Placer County (the land area identified as the PFG under Proposed PCCP) does not reach buildout. Specifically, the housing, population, and employment growth forecast for the 50-year permit term absorbs about 20,000 acres of the Valley PFG, as noted above. This leaves roughly 10,000 acres of remaining Valley PFG to absorb more population and employment growth beyond the PCCP take authorizations [29,899 acres (from Table 1 in this memorandum) – 19,545 = 10,354 acres].
- ◆ By contrast, because Alternative L reduces the new development potential of the of the Valley PFG by more than 50 percent, this smaller land area would most likely be fully developed within the 50-year permit term horizon, possibly by year 35 based on the rough growth scenario outlined in the PCCP (Table 2-5. Land Development to Accommodate Growth for the 50-year Permit Term by 10-year Period and Appendix M. *Growth Scenario Memo*). Notably, the total amount of development covered under the PCCP would be substantially reduced because of the reduced size of the PFG, resulting in substantially less funding and/or land dedications for habitat and species mitigation.
- ◆ To the extent the expanded RAA designation resulted in a *de facto* decrease in total development potential, development land remaining within the smaller PFG would likely be developed at higher densities to accommodate demand. This would result in less development mitigation relative to population and employment growth compared to the balance under the Proposed PCCP.
- ◆ Some residential and non-residential development that would be accommodated in unincorporated western Placer County and the City of Lincoln under the PCCP would instead be accommodated in Roseville (also in Placer County) or, alternatively, outside of Placer County elsewhere in the region. This would be counter to the stated PCCP purpose of “allowing appropriate and compatible growth in accordance with applicable laws”.
- ◆ Urban development and associated case-by-case mitigation would likely proceed within the expanded RAA according to planned land use designations resulting in inconsistent, patchwork mitigation that is not subject to PCCP requirements and is unlikely to achieve the goals of the PCCP regional conservation strategy.