

Appendix I
**Project Specific Take and
Mitigation Assessment Example**

Appendix I

Project Specific Take and Mitigation Assessment Example

I.1 Background

This document gives several examples of how the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) fees would apply to a range of private sector development projects with an emphasis on the Valley. The presentation here is a schematic of the PCCP program participation process and calculation of fees based on assessed effects on land cover, the stream system, and special habitats. These hypothetical scenarios consider a range of effects and apply the fees found in Table 9-6 (*Land Conversion Fee Schedule*) and Table 9-7 (*Special Habitats Fee Schedule*).

I.2 PCCP Development Fees Summary

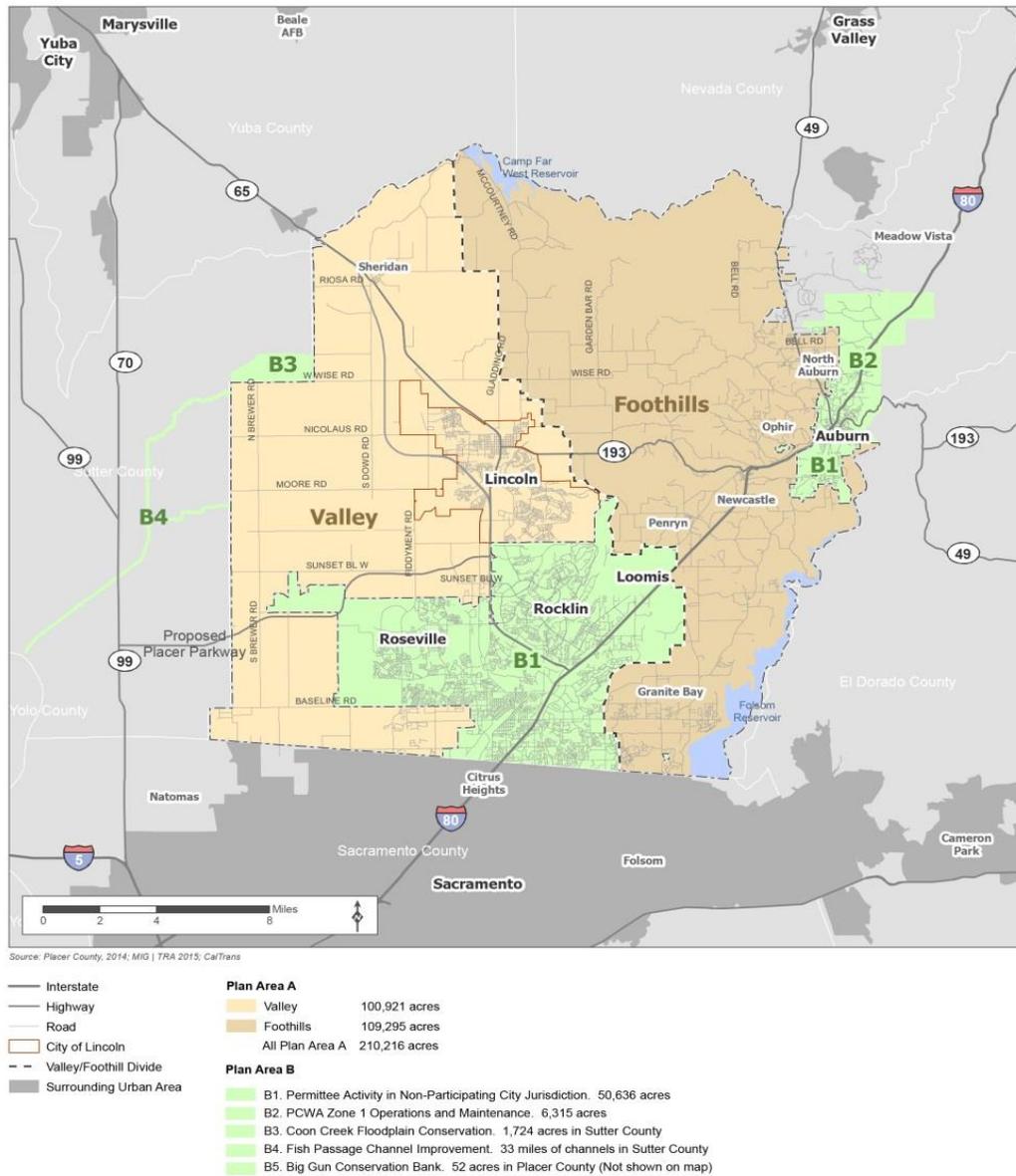
Chapter 9 of the HCP/NCCP describes the three types of Development Fees that will be paid as a result of effects from private and public Covered Activities to assist in meeting both Endangered Species Act (ESA) and NCCP Act requirements. Fees will generate sufficient funding to offset a proportionate share of HCP/NCCP costs including endowment contributions to fund all post-permit activities in perpetuity (see Section 9.3.8, *Costs in Perpetuity*) and reimbursement of the local share of plan preparation costs (see Section 9.3.9, *Plan Preparation Costs*). This proportionate share is based on the cost of mitigation that will offset losses of land-cover types, Covered Species' habitat, and other biological values, as well as benefits related to open space and fuels management. These one-time fees pay for the full cost of mitigating project effects on the Covered Species and natural communities.

Fees are based on the maximum allowable permanent loss of land-cover types presented in Chapter 4, *Effects of Covered Activities*. Land-cover effects are used because land cover and the associated presence of species is the best predictor of potential species habitat and is applicable to all of the Covered Species (see Appendix A, *Implementing Ordinance Template*, and Appendix D, *Species Accounts*). Effects on land cover are also used, in part, as the basis of the conservation strategy (see Chapter 5, *Conservation Strategy*, for details that determines Plan costs). The following HCP/NCCP development fees will apply in the Plan Area.

- Land Conversion Fee
- Special Habitat Fees
- Temporary Effect Fee

Figure I-1 depicts the geographic boundary between the Foothills and Valley for purposes of fee calculations. The Foothills fee also applies to the higher elevation portion of the City of Lincoln planning area roughly eastward of a line dropped due south from the intersection of Virginiatown Road and Hungry Hollow Road, and pulled west to follow the 200' elevation line which runs roughly along the Nevada Irrigation District canal north of State Route 193 and Oak Tree Lane.

Figure I-1 Western Placer County and the Plan Area



In addition to the Development Fees, there are Open Space and Fuel Load Management Fees that are applied to projects that are not otherwise subject to the Development Fees. These fees only apply to the Foothills Area depicted on Figure I-1.

Tables 9-6 and 9-7 are incorporated into this Appendix for ease of use. The temporary effects fee is equal to 2 percent of the Land Cover Fee (See Section 9.4.1.5 *Temporary Effects*). For additional information on the most recent fee schedule, interested parties should contact the Placer Conservation Authority (PCA) or the Permittee (County/City) with land use authority over a project.

Table I-1
Table 9-6 from Chapter 9 of the HCP/NCCP

Land Conversion Fee Schedule

Plan Area A - Valley (Components A1 and A2)		
	Any Existing Parcel up to 20,000 square feet	No fee (not a Covered Activity)
1a	Covered Activity on Existing Parcel greater than 20,000 square feet up to 1.0 acre	\$ 4,932 per acre
1b	Single family residential on Existing Parcel greater than 1.0 acre or any parcel created by subdivision of an Existing Parcel into four or fewer total parcels	\$ 3,699 per parcel plus \$ 1,233 per acre up to \$24,660 maximum ^a
1c	All other Covered Activities	\$25,128 per acre
Plan Area A - Foothills (Components A3 and A4)		
	Any Existing Parcel up to 20,000 square feet	No fee (not a Covered Activity)
2a	Residential project on Existing Parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,292 per dwelling unit
2b	Non-residential project on Existing Parcel greater than 20,000 square feet up to 1.0 acre	\$ 3,301 per acre
2c	Single family residential on Existing Parcel greater than 1.0 acre or on any parcel created by subdivision of an Existing Parcel into four or fewer total parcels	\$ 2,292 per parcel plus \$ 1,173 per acre up to \$23,460 maximum ^a
2d	Single family residential on any parcel created by subdivision of Existing Parcel into five or more total parcels and all multi-family residential	\$ 2,292 per dwelling unit plus \$ 5,849 per acre
2e	Non-residential project on Existing Parcel greater than 1.0 acre or on any parcel created by subdivision	\$ 9,150 per acre
Plan Area B		
Valley (Component B1: Roseville / Rocklin / Loomis area)		
3a	All Covered Activities	\$25,128 per acre
Foothills (Component B1: Auburn area and Component B2)		
3b	Covered Activity on Existing Parcel up to 1.0 acre	\$ 3,301 per acre
3c	Covered Activity on Existing Parcel greater than 1.0 acre	\$ 9,150 per acre

Notes:

All amounts in 2017 dollars

Fee schedule applies to permanent effects. See PCCP, Chapter 9, Section 9.4.1.5, *Temporary Effect Fee*, for application of fee to projects with temporary effects.

Non-covered activities are not subject to PCCP Development Fees but may be subject to other local fees for impacts to other resources such as open space and native trees.

Per acre fees apply to the entire parcel area excluding improved areas and where avoidance occurs pursuant to Section 6.3.1.3, General Condition 3, Land Conversion, including land approved by the PCA set aside as habitat. Per acre fees apply only to the disturbed area of Covered Activities that are limited to appurtenant, accessory, or ancillary activities or structures on parcels with low density rural development (See Section 6.3.1.3.2, *Permanent Effect Avoidance for Low Density Rural Development*).

"Existing Parcel" refers to a parcel at time of Plan adoption.

For mixed use projects with multi-family residential, the project pays the higher fee of either category 2d or category 2e.

Plan Area A - Foothills includes that portion of Plan Area A - Valley that is the higher elevation portion of the City of Lincoln planning area roughly eastward of a line dropped due south from the intersection of Virginiatown Road and Hungry Hollow Road and pulled west to follow the 200' elevation line which runs roughly along the NID irrigation ditch north of Hwy. 193 and Oak Tree Lane.

^a Maximum amount per parcel applies to per acre fee only. Per parcel fee is in addition to per acre fee.

Table I-2
Table 9-7 from Chapter 9 of the HCP/NCCP

Special Habitats Fee Schedule

Name	Amount	Temporary Effect Fee Applicable?
4a Vernal Pool Direct Effects	\$109,550 per acre	Yes
4b Vernal Pool Immediate Watershed Effects ^a	\$ 18,296 per acre	No
4c Aquatic/Wetland	\$ 74,964 per acre	Yes
4d Riverine/Riparian	\$101,020 per acre	Yes
4e Riverine/Riparian Buffer ^b	\$50,510 per acre	No
4f Stream System Encroachment ^c	\$101,020 per acre	No
4g Salmonid Stream Channel ^d	\$ 591 per linear foot	No

Note: All special habitat fees are paid in addition to the land conversion fee.

^aVernal pool constituent habitat delineated wetland on a project site not altered by ground disturbance within an immediate watershed that is altered by ground disturbance. See Section 6.3.2.1.1 *Community Condition 1.1, Avoidance for Vernal pool-Type Wetlands*. Set equal to 1/6 of fee 4a vernal pool direct effects.

^bGround disturbance not in stream system but within 50 feet of riverine/riparian constituent habitat. Set equal to ½ of fee 4d riverine/riparian.

^cArea subject to stream system encroachment excludes any area already subject to a constituent habitat fee (such as a riverine/riparian fee).

^dSalmonid stream channel fee paid in addition to any other applicable special habitat fees.

The fee scenarios described in this Appendix will account for impacts to covered species and their habitat as well as impacts to Aquatic Resources of Placer County. For additional information on the cost of implementing the HCP/NCCP during the permit term and post-permit costs, see Chapter 9 (Costs and Funding) of the HCP/NCCP. For additional information on impacts to Aquatic Resources of Placer County, see the County Aquatic Resources Program.

I.3 HCP/NCCP Permit Processing

This section of Appendix I provides several examples of how the HCP/NCCP would apply to a hypothetical 100-acre tentative map in the Valley. The presentation here is a schematic of the HCP/NCCP program participation process and calculation of fees based on assessed effects on land cover, the Stream System, and special habitats. This hypothetical example considers two candidate projects: Project “A” which maximizes development of the site and Project “B” which substantially avoids impact on vernal pools and the Stream System. This example also provides specific details on how to determine indirect effects on vernal pool constituent habitats which is not included in the fee scenarios described above.

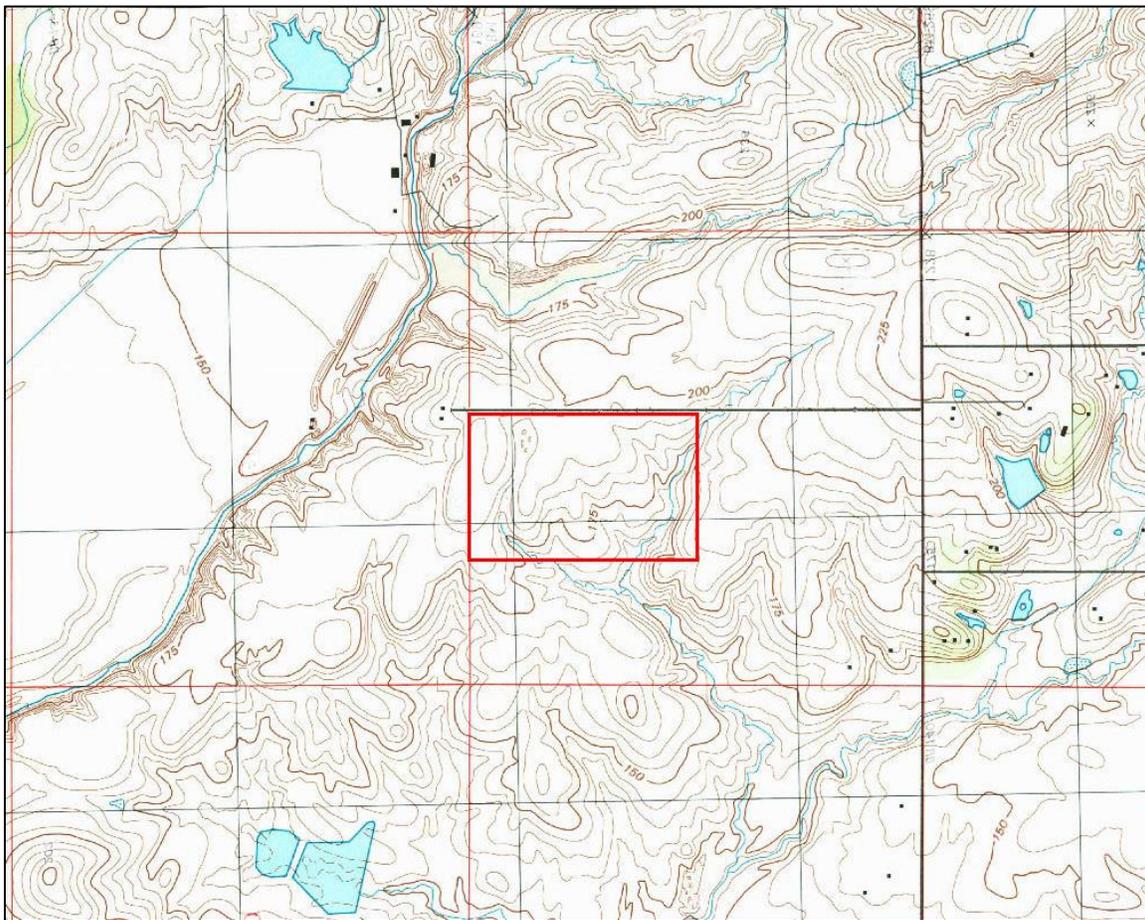
I.3.1 Step 1: Preliminary Site Analysis

The biological resources effects assessment begins with the preparation of a series of maps identifying the site, the resources noted there on vegetative base maps and other supporting documentation required by the Plan. This package of information is known collectively as the HCP/NCCP participation package (See Section 6.2.4 *HCP/NCCP Participation Package*). Private applicants who seek coverage under the Plan will initiate the review of their project by applying to

the County or the City of Lincoln by submitting a complete HCP/NCCP participation package. This information will typically be submitted concurrent with other application materials required by the County or City for project entitlements. The process of initiating participation in the Plan will be integrated into the local jurisdictions' normal CEQA procedures for discretionary permits or, for ministerial projects, the normal land development review process.

In addition to the mapping requirements, the HCP/NCCP participation package includes a biological resources assessment to determine the effects of the project with the land cover types present on the project site. The review of the HCP/NCCP participation package will also include species survey requirements and survey data results (See Section 6.3.5.1 *Surveys for Select Covered Wildlife Species*), and the application of conditions to avoid and minimize effects on covered species and their habitat (See Section 6.3. *Conditions on Covered Activities*).

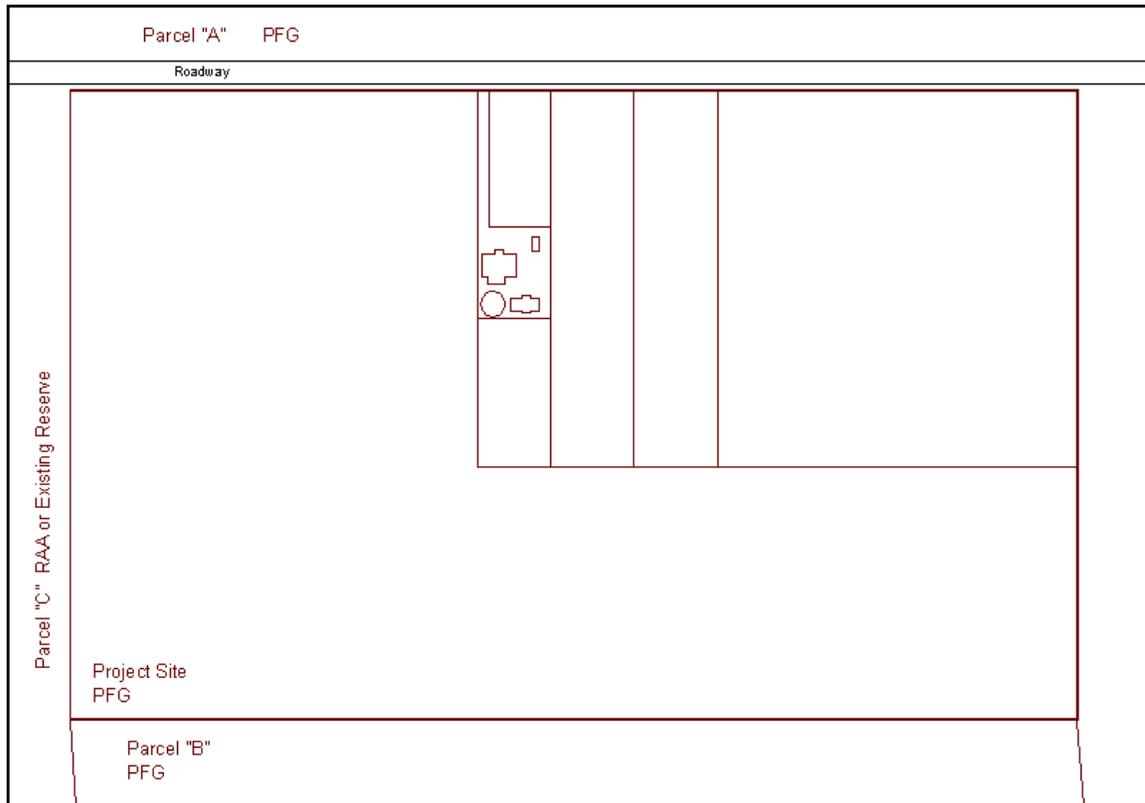
Figure I-2 Project location on USGS map



The project location (Figure I-2) is depicted on a USGS map and includes the project site boundary and 1-mile of the surrounding area based on the National Hydrology Database (See Section 6.2.4.2 *Item 2: Project Description and Site Map* for additional information on submittal requirements). This provides site location, vicinity conditions, and indicates the presence of “blue line streams” that will establish the Stream System defined by the HCP/NCCP (See Section 6.2.4.5 *Item 5: Mapping the*

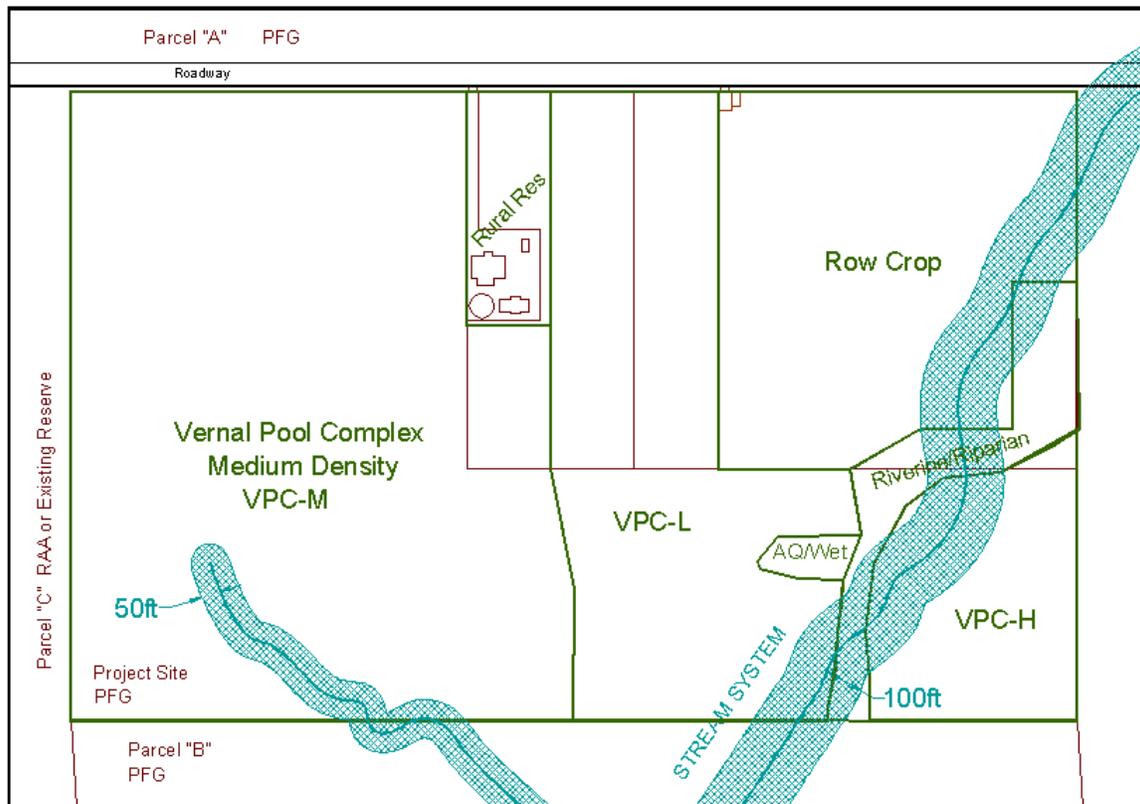
Stream System and Salmonid Streams). In this fictitious example, the 100-acre site includes a few segments of blue line stream and shows a road running along the north side of the site.

Figure I-3 Parcels comprising project site



A site plan will be needed which depicts the project's existing conditions (Figure I-3). In this example a map has been prepared that shows the site's parcels as they were constituted at the time of Plan adoption and will determine which fee categories may apply. In this hypothetical 100-acre Valley example, the project site comprises five separately saleable parcels including one 5-acre parcel within a rural residential setting. The project site is designated in the HCP/NCCP as "Potential Future Growth" (PFG) meaning that development entitlements were anticipated in this area providing that mitigation for covered species take complies with the HCP/NCCP. The project site is bounded on the north by Parcel "A" across a public road, on the south by Parcel "B" across a fence line, and on the west by Parcel "C" which is in the Reserve Acquisition Area (RAA) and is already in the reserve system.

Figure I-4 Land Cover base map applied to site



Land cover data is applied to the base map utilizing the HCP/NCCP's biological resources inventory as supplied by the local jurisdiction to the project proponent in a format that is consistent with County/City requirements (e.g. biological resource inventory map, AutoCAD or ESRI GIS). The HCP/NCCP's biological resources inventory shows the baseline land cover map, the location of existing reserves, and updates of covered species occurrences (Figure I-4). (See Section 6.2.4.3.1 *Community Mapping*).

The Stream System map maintained by the Placer Conservation Authority (PCA) shows the HCP/NCCP defined Stream System Boundary applied to the USGS blue line streams. The land cover map maintained by the PCA for the Permittees shows the rural residential parcel, row crops, and vernal pool complex (VPC). The land cover map also identifies the eastern stream reach as salmonid fish habitat.

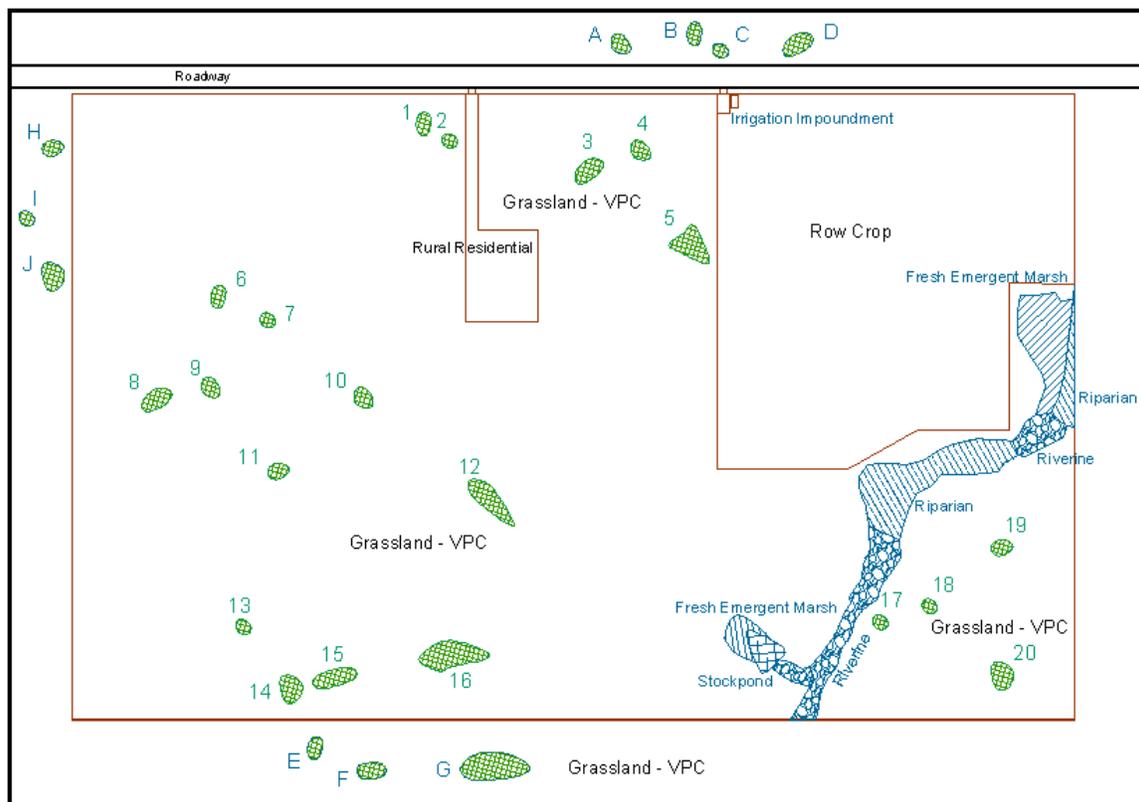
The main blue line stream also was originally mapped during the Plan preparation phase as Riverine/Riparian and Aquatic/Wetland although these do not seem to line up clearly with the Stream System as mapped around the blue line stream. Improving the accuracy of the mapping that was prepared during the Plan preparation phase will be a common occurrence when site specific mapping is prepared based upon actual field surveys.

Based on the review of the land cover map, the project is required to have a qualified biologist more precisely delineate the wetlands and riverine/riparian habitat, and more precisely identify other vegetative communities present on site. The qualified biologist will also need to indicate the likely

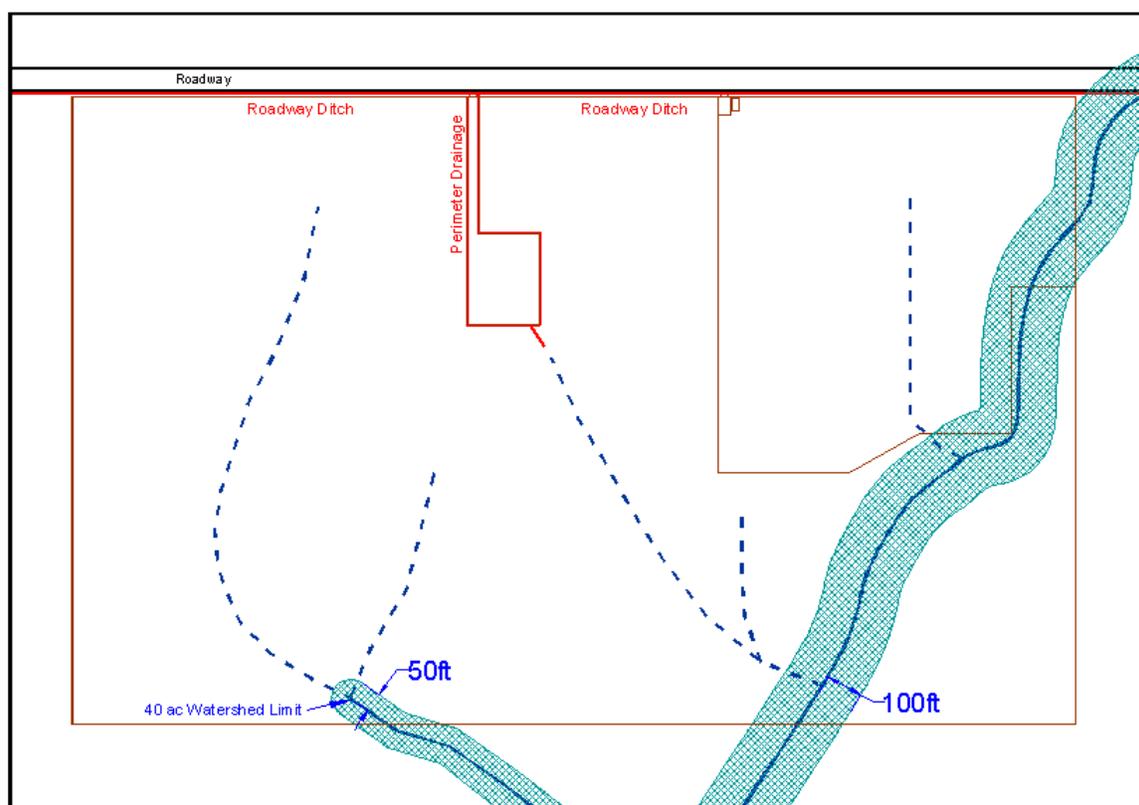
presence of wetlands and vegetative communities on adjacent properties. Because adjoining properties are likely to have limited access, the assessment can be based on aerial photography and visual surveys at the property line (See Section 6.2.4.4 *Item 4: Mapping HCP/NCCP Aquatic Features*).

The aquatic features map (Figure I-5) includes a formal wetland delineation that shows the actual location of numerous vernal pool constituent habitats scattered throughout the property, non-vernal pool wetlands, and riverine/riparian and aquatic/wetland habitats along the stream. Several vernal pools are mapped off-site. (See Section 6.2.4.4 *Mapping HCP/NCCP Aquatic Features*).

Figure I-5 Mapping HCP/NCCP Aquatic Features



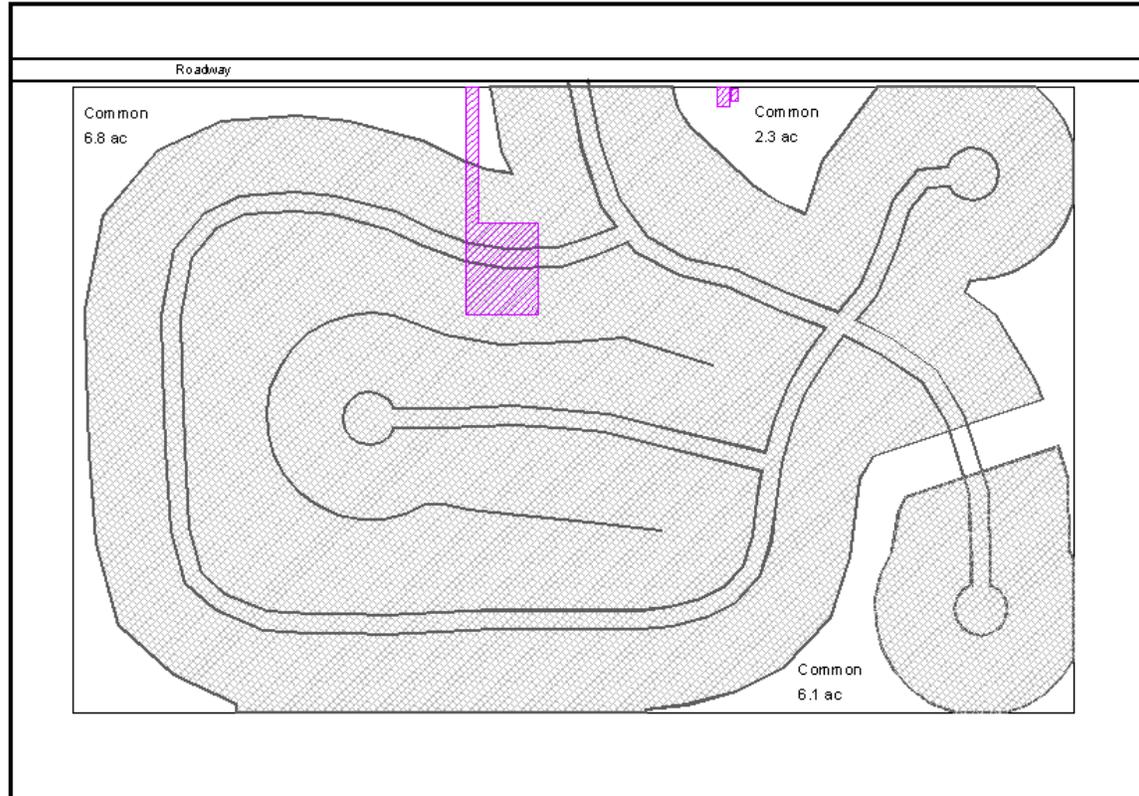
An additional map is prepared that (Figure I-6) identifies the actual position of the stream channels which define the location of the Stream System boundary on site (See Section 6.2.4.5 *Item 5: Mapping the Stream System and Salmonid Streams* and Figure 9-1 from Chapter 9). In this example, the stream channel locations did not align with the original USGS mapping. The new data will replace the land cover mapping prepared during the Plan preparation phase. Several existing features – the roadway ditch and elevated ground around the rural residence – define hydrological barriers. The western stream segment is truncated at the point where the watershed falls below 40 acres in extent. This mapped Stream System Boundary will be used to determine the project’s impact and fees required.

Figure I-6 Mapping the Stream System

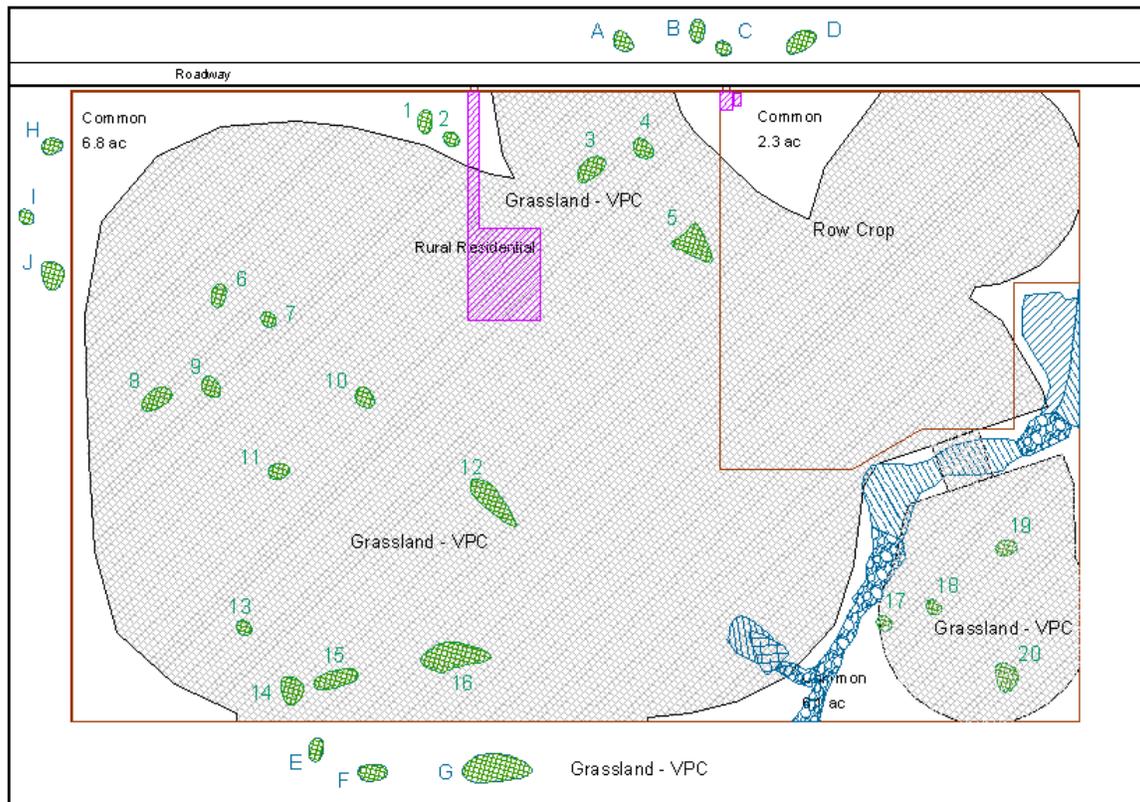
Once all of the biological resources are mapped consistent with the requirements for a complete HCP/NCCP participation package, it will be necessary for the County or City to evaluate the existing land cover types against baseline conditions (See Section 6.2.4.3.2 *Baseline Land-cover Map Consistency Finding*). If current site conditions reflect a substantial degradation of habitat conditions from baseline conditions (e.g., from a change or intensification of land uses), project effects and mitigation requirements will be calculated using the baseline conditions instead of the current, degraded site conditions.

I.3.2 Step 2 for Project Scenario “A”: Project Assessment – Maximum Utilization of the Site

Hypothetical Project Scenario “A” is a schematic of a “lot and block” subdivision with homes surrounding an internal road network on an 85-acre development footprint (Figure I-7). In order to access the southeast corner of the site, one of the roads must cross the stream with a small bridge. Because of the project’s design, there are residual areas of common area open space around the periphery and along most of the salmonid stream.

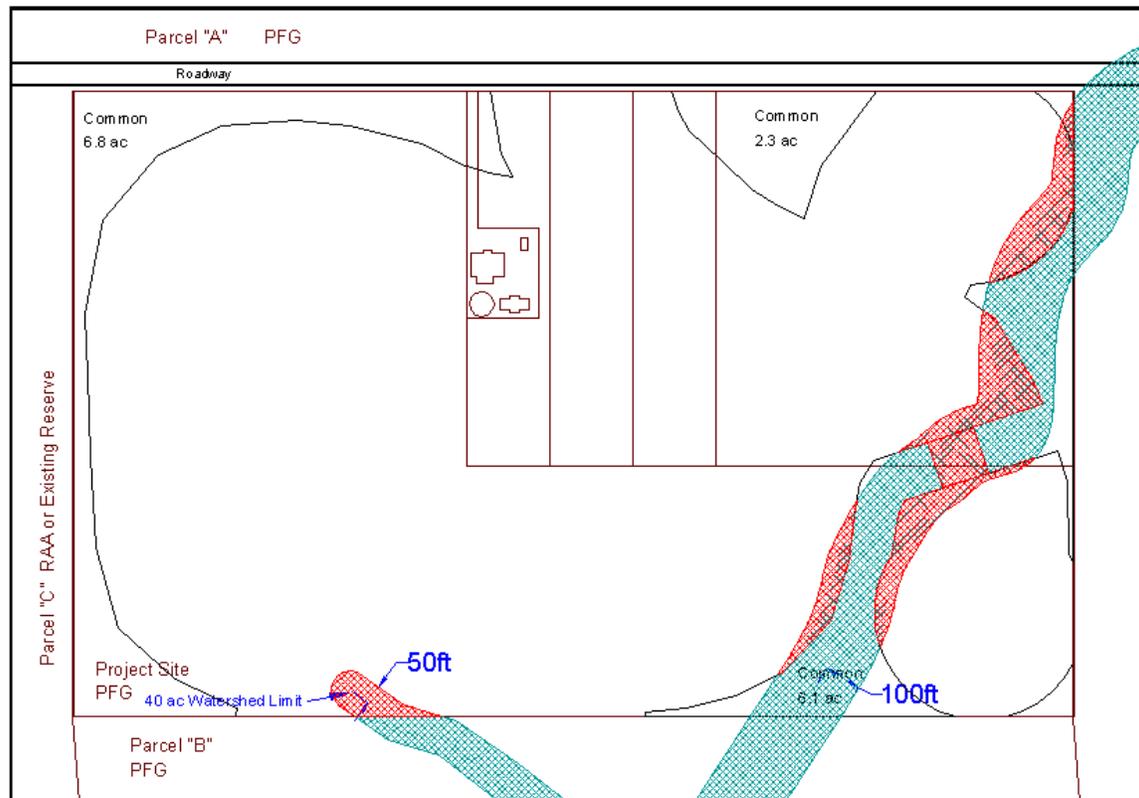
Figure I-7 Project Scenario "A" Footprint

Because none of these areas of open space meet the avoidance criteria (See Section 6.3.1.3.1 *Permanent Effect Avoidance in the Valley PFG*), the project is considered to have a land conversion impact on the entire 100-acre site minus the areas of existing development. Taking into account the land cover mapping, the Land Conversion Fee (See Section 9. 4.1.3 *Land Conversion Fees*) would apply to all natural, semi natural, and other agricultural land cover which includes the vernal pool complex and the row crops. The 1.3-acre area immediately occupied by the rural residence and several existing roads are considered existing development and are exempt from land conversion fees. The result is that there are a total of 3.1 exempt acres and 96.9 acres subject to the Valley Land Conversion fees.

Figure I-8 Project Scenario “A” Effect on Special Habitats

The proposed project overlain on the special habitats map shows the extent of vernal pool constituent habitat, other wetlands, and riverine/riparian habitats that will be impacted by the project (Figure I-8). Although some of the vernal pools (VP 1 and VP 2) are in one of the areas of common open space, the project’s development footprint comes within the immediate watershed (See Section 6.3.2.1.1 *Community Condition 1.1, Avoidance of Vernal Pool Complex Constituent Habitat*) of those pools and hence special habitat fees (See Section 9.4.1.4 *Special Habitat Fees*) will be owed as well as for the vernal pools under the project footprint. The stream crossing will directly remove riparian vegetation which will be subject to the Riverine/Riparian Special Habitat Fee. Because all of the riverine/riparian impacts are within the Stream System Boundary, the Riverine/Riparian Buffer Fee is not applicable. Construction of the bridge will result in a small amount of temporary disturbance that will be subject to the Temporary Effects Fee (See Section 9.4.1.5 *Temporary Effect Fee*).

The biological resources assessment identified vernal pool type wetlands on the three adjoining parcels. Some of these wetlands have an immediate watershed of potential impact that extends onto the project site. Off-site vernal pools to the north (vernal pools A-D) are hydrologically isolated from the project by the public roadway along the northern boundary; pools to the west are isolated by topography. Vernal pools to the south on Parcel “B” (vernal pools E-G) are subject to indirect effects from the project. Although no fee is paid on the area of these adjoining wetlands, the PCA must report their indirect take to the Wildlife Agencies in their annual reporting.

Figure I-9 Project Scenario "A" Encroachment on the Stream System

The project footprint encroaches into the Stream System Boundary (Figure I-9). Even though the land cover in the area of encroachment is not specifically riverine or riparian, it is subject to the Stream System Special Habitat Fee (See Section 9.4.1.5 *Calculating Fees for Wetland or Stream Effects*). The eastern stream reach was identified as salmonid fish habitat. Construction access and the bridge affect 80 linear feet of stream bed which is subject to the Salmonid Stream Special Habitat Fee (See Section 9.4.1.4.1 *Calculating Fees for Wetland or Stream Effects*) in addition to the Stream System Special Habitat Fee.

I.3.3 Step 3 for Project Scenario "A": Fee Calculations

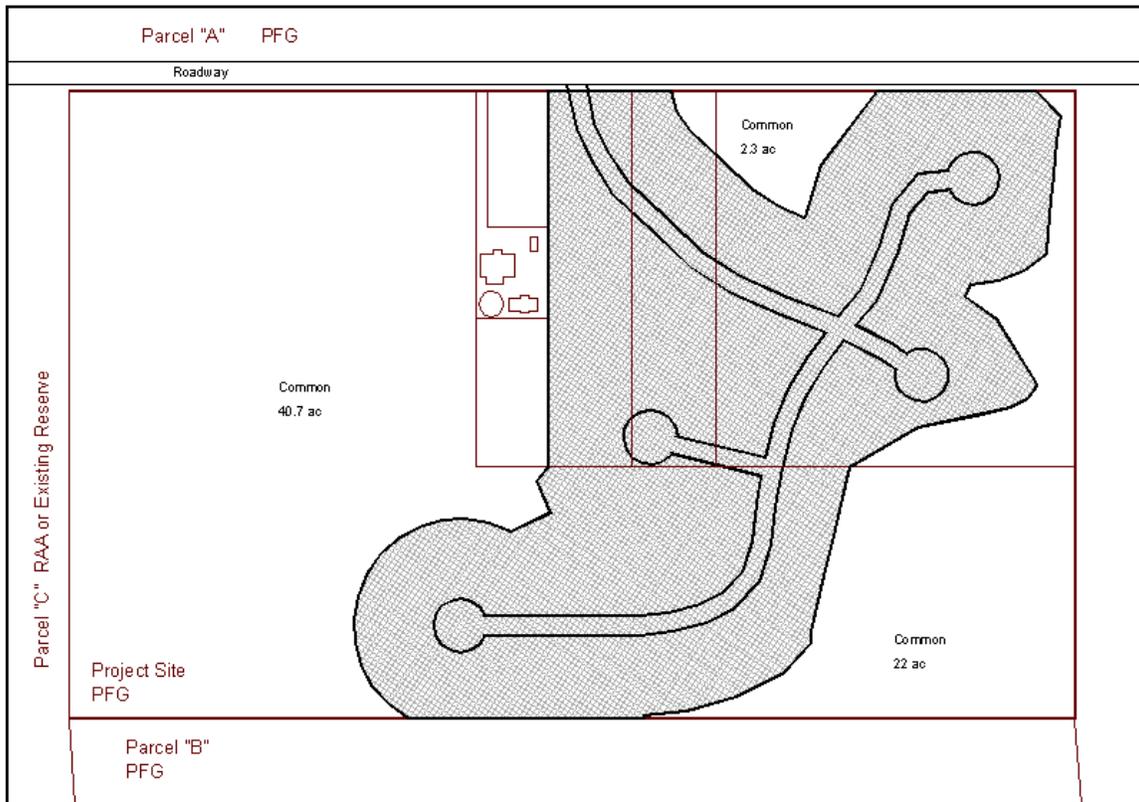
Project Scenario A maximizes the development potential of the site's holding capacity expressed through the general plan and zoning. As a result, the project has a limited amount of avoidance of the site's special habitats. Open space areas provide a number of common area functions for the project (e.g., passive recreation, stormwater quality improvements, buffers, and habitat avoidance) but do not provide a suitable level of avoidance to avoid effects and/or make a contribution to the reserve system.

Applicable PCCP Development Fees (See Tables 9-5, 9-6 and 9-7)

Valley Land Conversion Fee Type:	1c
Land Conversion Fee Amount:	96.9 acres X \$25,128/acre = \$2,434,903
Special Habitat Fees:	
Vernal Pool Wetlands, Direct	1.3 acres X \$109,950/acre = \$142,935
Vernal Pool Wetlands, Indirect On-Site	0.07 acres X \$18,296/acre = \$1,281
Vernal Pool Wetlands, Indirect Offsite	0.34 acres – no applicable fee
Aquatic/Wetland	0.32 acres X \$74,964 = \$23,988
Riverine/Riparian	0.24 acres X 101,020/acre = \$24,245
Stream System	3.31 acres X \$101,020/acre = \$334,376
<u>Salmonid Channel Fee</u>	<u>80 linear feet X \$591/linear feet = \$47,280</u>
Subtotal Special Habitat Fees:	\$574,105
<u>Temporary Effect Fee:</u>	<u>(0.15acres X \$25,128) X 0.02 = \$75</u>
Total:	\$3,009,083

I.3.4 Step 2 for Project Scenario “B”: Project Assessment – Reduction of Impacts on Vernal Pools and the Stream System

In the second scenario on the same site, Project Scenario “B” reduces the subdivision development footprint to 36 acres, avoiding much of the vernal pool lands on the west and eliminating the requirement to cross the salmonid creek to reach the southeastern portion of the site (Figure I-10).

Figure I-10 Reduced Project Scenario “B” Footprint

The alternative design on the same site creates common area open space which may meet avoidance criteria for the PCCP. The 40.7-acre open space area on the west meets the criteria for adjacency to the RAA or an established reserve and for the presence of valuable biological resources, in this case vernal pool complex with wetlands. The 22-acre common open space surrounding the westerly stream and would meet the criteria for adjacency to the Stream System and presence of valuable biological resources, in this case the salmonid stream, riparian vegetation, fresh emergent marsh and a small portion of vernal pool complex. The 2.3-acre common open space on the north surrounded by the existing public roads and the proposed subdivision would not meet avoidance criteria (See Section 6.3.1.3.1 *Permanent Effect Avoidance in the Valley PFG*). The resulting development footprint of 37.3 acres is substantially smaller than the 96.9 acres of footprint in Project Scenario “A” but would yield a smaller number of dwelling units if approved (unless local zoning requirements allowed for a density transfer within the project boundary such as a planned development).

The avoidance of the western portion of the parcel spares several vernal pool wetlands from direct effects, but raises the issue of indirect effect. The Project Scenario “B” is also used to explore the process of calculating indirect effects on vernal pools by evaluating the project’s potential effects in the area known as the “immediate watershed”.

I.3.5 Step 3 for Project Scenario “B”: Fee Calculations

The Project Scenario “B” will pay fewer fees than Project Scenario “A” because it is able to partially avoid land conversion, special habitats, and the Stream System encroachment and it completely avoids impacts on the salmonid stream channel. Land conversion fees will be based on a smaller development footprint and the 2.3-acre remnant open space fragment on the north which will pay the full land cover fee. The 40.7-acre remnant area on the west may be considered avoided (and not subject to fees) because it is adjacent to the RAA or an existing reserve, and the 22-acre area around the salmonid stream on the southeast may also be considered avoided depending on the condition of the stream and any aquatic and riverine/riparian habitat that is present.

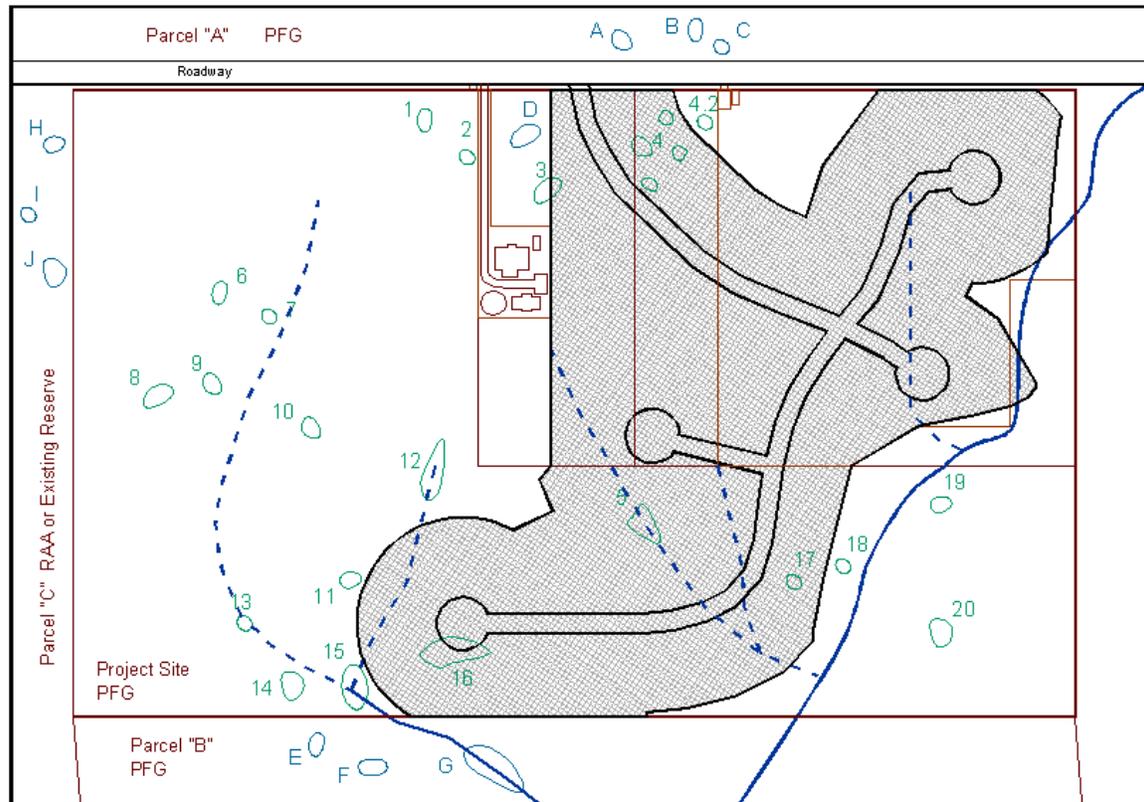
Applicable PCCP Development Fees

Valley Land Conversion Fee Type:	1c
Land Conversion Fee Amount:	37.3 acres X \$25,128/acre = \$937,274
Special Habitat Fees:	
Vernal Pool Wetlands, Direct	0.64 acres X \$109,950/acre = \$70,368
Vernal Pool Wetlands, Indirect On-Site	0.24 acres X \$18,296/acre = \$4,391
Vernal Pool Wetlands, Indirect Offsite	0.32 acres – no applicable fee
Aquatic/Wetland	0.12 acres X \$74,964 = \$8,996
Riverine/Riparian	0.09 acres X 101,020/acre = \$9,092
<u>Stream System Encroachment</u>	<u>0.41 acres X \$101,020/acre = \$41,418</u>
<u>Subtotal Special Habitat Fees:</u>	<u>\$134,265</u>
Total:	\$1,071,539

I.3.6 Vernal Pool Wetland Indirect Take Example

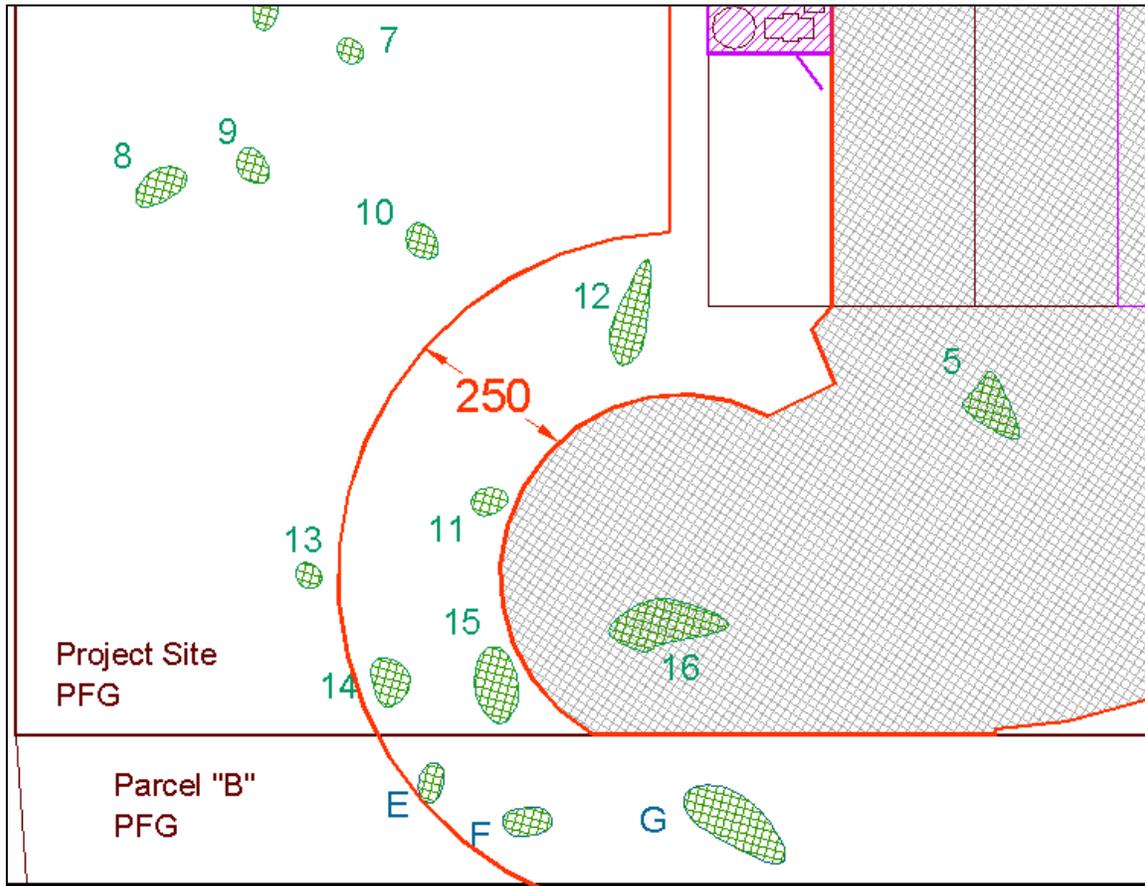
The Project Scenario “B” would build on only a portion of the hypothetical 100-acre project site (Figure I-11). The site is bounded on the north by a public roadway with Parcel A on the far side, on the west by parcel C which would be RAA or an existing reserve, and on the south by parcel B designated in the PCCP as potential future growth area (PFG). The example shows an existing rural residential property in the center on the north and several pieces of remnant open space.

Figure I-11 Project Scenario “B” Footprint and Vernal Pool Type Wetlands.



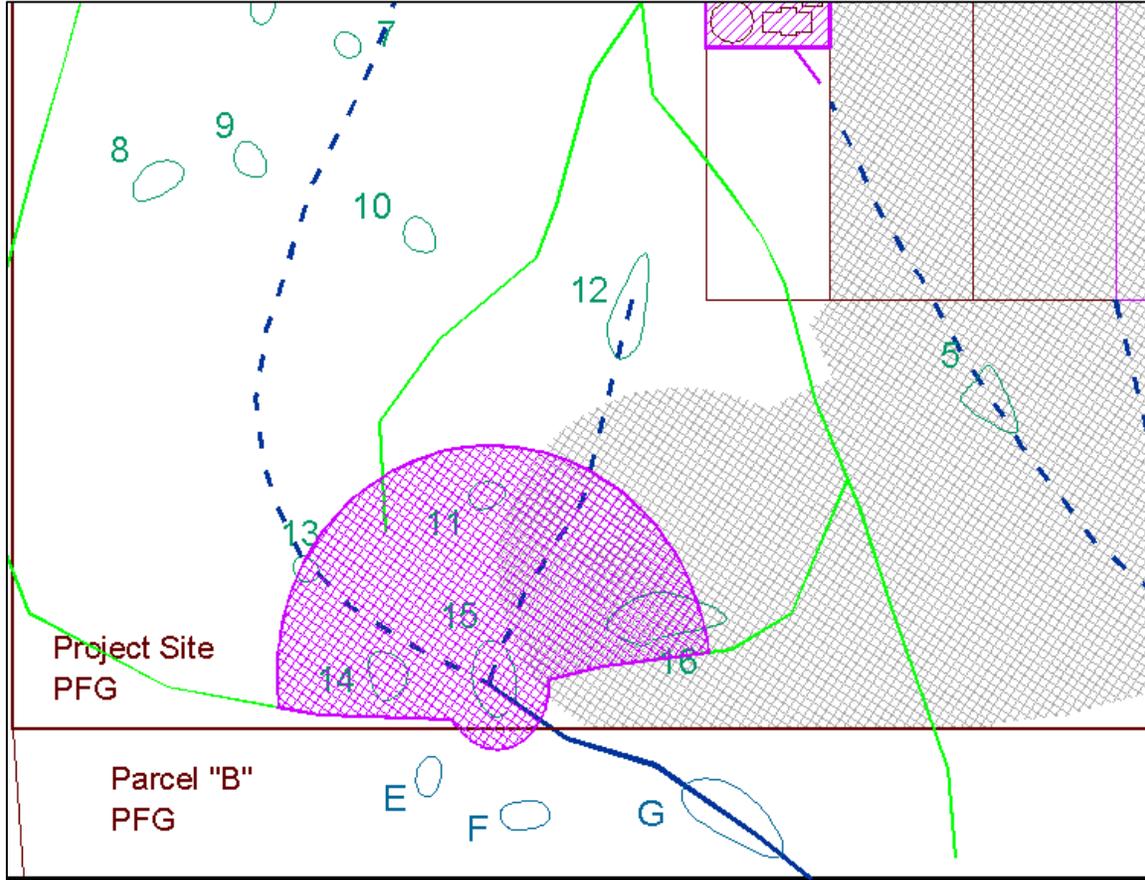
Numbered wetlands (e.g. #1, #2, etc.) are located on the project site and have been located and characterized by the required wetland delineation. Lettered wetlands (e.g. A, B, etc.) are located off-site, and have been mapped using aerial photography or other remote sensing. The reader is urged to bear in mind that this is a schematic intended to illustrate application of the HCP/NCCP – it is not based on a real property or on an actual wetland delineation and hence is not intended to reflect ecological relationships that would commonly be found in the field.

Figure I-12 depicts the project footprint overlaid on the vernal pool type wetland delineations. From this point forward the scenario focuses on the southwest corner of the project site to see how wetlands are affected and in particular how indirect effects are evaluated for vernal pool type wetlands.

Figure I-12 Project Footprint Overlay on Vernal Pool Type Wetland Delineations

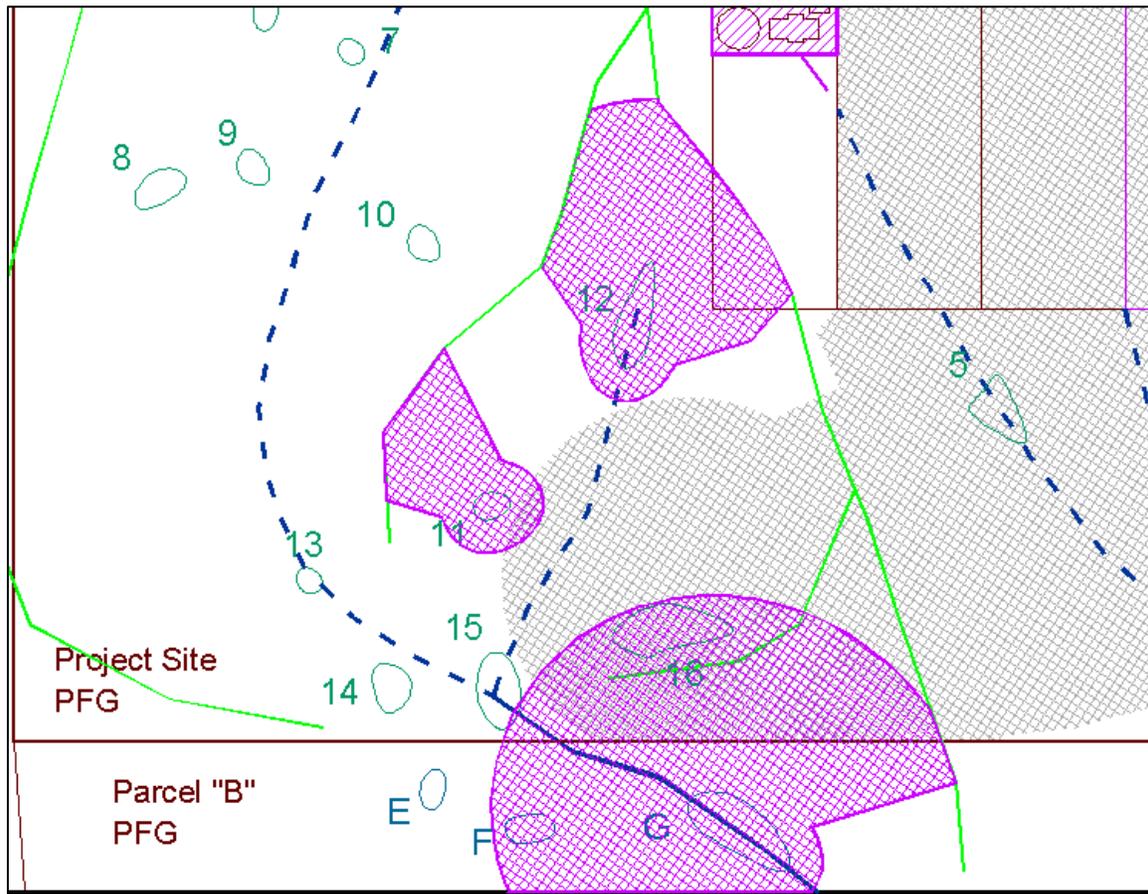
According to Community Condition 6.3.2.1.1 of the HCP/NCCP (*Avoidance for Vernal Pool Constituent Habitat Wetlands*) Wetlands #5 and #16 clearly fall under the project footprint and are subject to permanent direct take. Because of the 250-foot default buffer, wetlands that need to be evaluated for indirect effect are all of those that fall within 250 feet of the outer edge of the project footprint. In this example that includes on-site Vernal Pool Wetlands 11, 12, 14, and 15 and off-site Vernal Pool Wetlands E, F, and G located on Parcel B which is under different ownership than the project site. No ground access to these pools is available.

To determine the immediate watershed applicable to Vernal Pool Wetland #15, the drainage (blue) and watershed lines (green) are depicted and buffers are drawn around the wetland perimeter of Vernal Pool Wetland #15 at the distance of the 50 foot down gradient minimum and the 250-foot maximum in the watershed above as shown in Figure I-13.

Figure I-13 Evaluate immediate watershed of Pond #15

The immediate watershed of Vernal Pool Wetland #15 is the wetland's micro-watershed subject to the 50/250-foot minimum/maximum defaults as depicted in purple above using the default minimum standards for effects. If the project footprint overlaps any portion of the wetland's immediate watershed, then the wetland fails to meet the avoidance criteria in Community Condition 6.3.2.1.1, Setback Avoidance for Vernal Pool-Type Wetlands. In this case, Pond #15 is subject to indirect take and will be subject to the indirect effects fee.

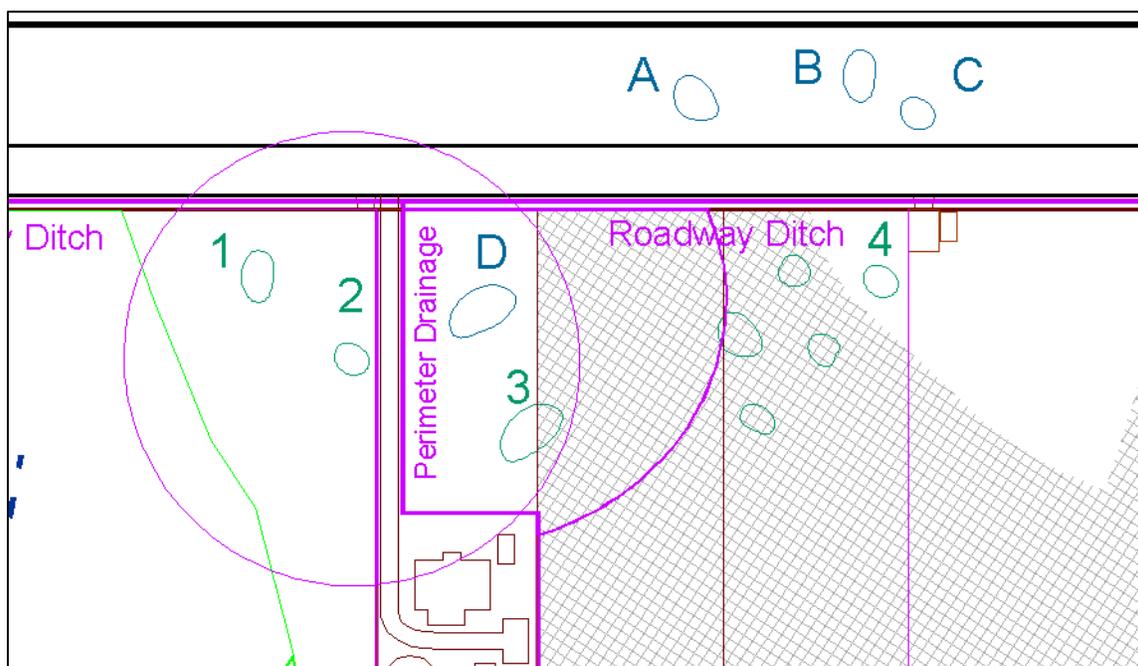
In Figure I-14 Vernal Pool Wetlands #11, #12 and off-site Vernal Pool Wetland G are evaluated.

Figure I-14 Determine the Immediate Watershed of Other Wetlands

The project footprint overlaps the immediate watershed of Vernal Pool Wetland #11 and off-site Vernal Pool Wetland G. The project does not overlap the watershed of Vernal Pool Wetland #12 because the relatively steep swale containing Wetland #12 places it at sufficiently higher elevation so that the project won't affect its hydrology. From this analysis the following conclusions can be reached:

- The indirect effect fee will not apply to Vernal Pool Wetland #12.
- The indirect effect fee will apply to Vernal Pool Wetland #11 which is on-site.
- No fee will apply to off-site Vernal Pool Wetland G, but the PCA and the Permittees will be required to estimate the area of wetlands affected and to keep it in the summary of off-site indirect effects.

Figure I-15 evaluates the vernal pool wetlands to the North of the project that are located on an adjoining rural residential property.

Figure I- 15 Offsite Vernal Pool Wetlands

Project Scenario “B” has several vernal pool type wetlands on the north side of the project including offsite wetlands. In this case, the project footprint falls directly over the cluster of wetlands near Vernal Pool Wetland #4 and falls across a portion of Vernal Pool Wetland #3. The following conclusions can be reached about the wetlands depicted on Figure I-15:

- Because the project impacts a portion of the actual wetted area delineated for Vernal Pool Wetland #3, the entire wetland area of Wetland #3 is subject to the full permanent direct effect assessment and fee and will be reported as take by the PCA.
- The immediate watershed analysis will show that on-site Vernal Pool Wetland #4 and off-site Vernal Pool Wetland D pools will be subject to indirect effects and the Immediate Watershed Special Habitat Fee.
- On-site Vernal Pool Wetland #2 has a 250-foot buffer that crosses over the intervening rural residential property in this example and touches on the project footprint. In this example, the perimeter drainage and driveway established around the pre-existing rural residential use isolates the project footprint from the hydrology of Wetland #2 and hence Wetland #2 is not subject to indirect effect.
- Off-site Vernal Pool Wetlands A, B, and C are within 250 feet of the project footprint and may have formerly been part of the watershed of a vernal pool complex associated with Vernal Pool Wetlands #1, 2, 3 and 4, but the existing road and roadway drainage ditch clearly isolate the project from any hydrology impact on those pools. They are not considered subject to indirect effect.

In summary, the final assessment of vernal pool direct and indirect effects is depicted in Figure I-16. Vernal pools subject to permanent direct effect are shown in red; vernal pools subject to permanent indirect effect on-site are shown in cyan, and vernal pools subject to indirect effects off-site are

shown in green. Table I-3 shows the area in acres associated with this hypothetical example and how fees would be applied to the different categories of effect.

Figure I-16 Vernal Pool – Final Disposition

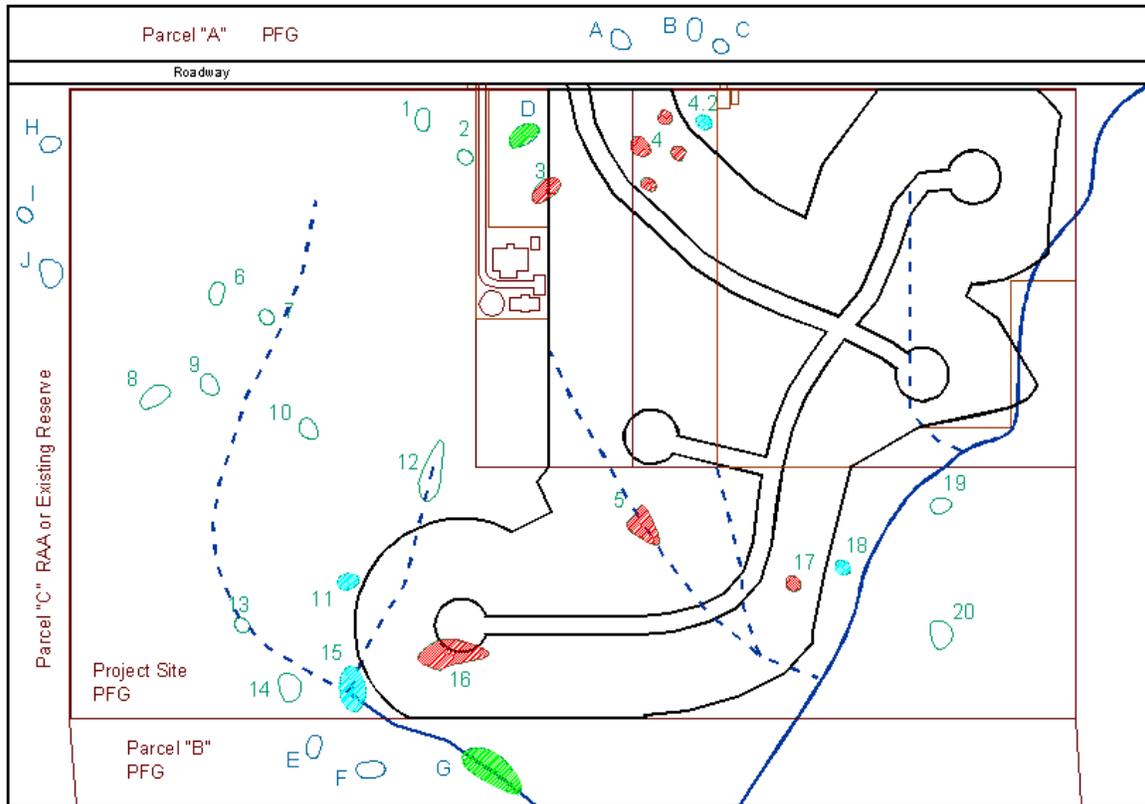


Table I-3 Project “B” Specific Vernal Pool Effect and Fees

Permanent Direct Effect		Permanent Indirect Effect, On-Site		Indirect Effect, Off-Site	
Pool ID#	Acres	Pool ID#	Acres	Pool ID	Acres
3	0.08	4.2	0.03	D	0.08
4	0.20	11	0.04	G	0.24
5	0.11	15	0.14		
16	0.22	18	0.03		
17	0.03				
Total	0.64		0.24		0.32
Fee \$/acre	\$109,550		\$18,296		
Fee owed	\$70,112		\$4,391		\$0