Appendix B

Option B – Mitigation Fees

Appendix B
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I. INTRODUCTION

The purpose of this Appendix report is to develop an oak woodland mitigation fee that meets the 2004 El Dorado County General Plan Policy 7.4.4.4, which specifies an Option B Mitigation Fee. The intent of the Option B mitigation fee is to provide compensation for impacts resulting from the loss of habitat and fragmentation of oak woodlands due to development.

The El Dorado County Board of Supervisors adopted the previous County General Plan in 1996. The Draft Environmental Impact Report (DEIR) of the 1996 General Plan was subject to a legal challenge over the proposed changes in land use, traffic congestion, water resources, and the oak woodland canopy (*El Dorado County Taxpayers for Quality Growth et al. v. El Dorado County Board of Supervisors et al.* – Case No. 96 CS 01290). The challenge alleged that the DEIR's canopy cover retention standards did not adequately address impacts to the oak woodland canopy. The basis for woodland conservation in the County under the 1996 General Plan was oak canopy retention and open-space policies. The canopy retention standards applied to discretionary projects involving parcels with an oak woodland canopy cover of at least ten percent (EDAW, 2003, Page 5.12-40). In addition, the practice of planting to mitigate oak trees proved problematic, since trees were inappropriately planted on-site and there have been few opportunities to assess how oak woodland habitats develop over time from areas planted (EDAW, 2003, Page 5.12-31). In 1999, the Sacramento County Superior Court issued a Writ of Mandate that ruled the 1996 General Plan DEIR deficient and placed a moratorium on development in the county until another General Plan could be adopted.

In response to the 1999 Writ of Mandate, the County adopted a new General Plan and certified an EIR for the General Plan in July 2004. A Motion for Review of County's Return to the Writ was subsequently filed with the Superior Court in August 2005. The Court ruled that the County went well beyond the direction of the 1999 Writ by providing an alternative to the retention requirements in the form of compensatory funding (Court Ruling, Page 5).

This alternative funding is found in the 2004 El Dorado County General Plan Policy 7.4.4.4, which specifies an Option B Mitigation Funding in lieu of replacement and retention requirements of Option A. The full text of Option B reads as follows:

> *"The project applicant shall provide sufficient funding to the County's INRMP conservation fund, described in Policy 7.4.2.8, to fully compensate for the impact to oak woodland habitat. To compensate for fragmentation as well as habitat loss, the preservation ratio shall be 2:1 and based on the total woodland acreage onsite directly impacted by habitat loss and indirectly impacted by habitat fragmentation. The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8."*

II. OPTION B MITIGATION FEE METHODOLOGY

A series of steps and analyses were applied to document and develop the fee, which accounts for the full cost of mitigation, including acquisition, restoration and management. The steps to develop the fee included the following:

- Clarification of the Option B Mitigation Ratio Policy, including defining full mitigation as it applies to the fee, and clarifying the mitigation ratio of 2:1;
- Identification of Potential Mitigation Alternatives for Acquisition, Restoration, Management and Monitoring;
- Evaluation of mitigation alternatives and development of specific alternative fee strategies;
- Estimating the costs (and fee) of acquiring, restoring and managing oak woodlands; and
- Methods for annual adjustments to the fee.

Each of these steps is described in detail in this appendix.

III. CLARIFICATION OF OPTION B MITIGATION RATIO

Mitigation is required for impacts resulting from the loss of habitat and fragmentation of oak woodlands due to development. The Option B policy states that compensation be applied to oak woodlands "*…directly impacted by habitat loss and indirectly impacted by habitat fragmentation. The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee."* Option B further references General Plan Policy 7.4.2.8, which relates to the Integrated Natural Resources Management Plan (INRMP) conservation fund. Subsection C of Policy 7.4.2.8 describes that a program be established "*...to facilitate mitigation of impacts to biological resources resulting from projects approved by the County that are unable to avoid impacts on important habitats."* For the OWMP to be consistent with the INRMP, mitigation needs to address, at a minimum, the biological resources associated with oak woodland habitats.

As contained in the Option B policy, full mitigation for the impacts is expressed at a 2:1 compensatory fee ratio. However, the policy does not make clear how this ratio is applied, whether using a unit measurement (e.g., per tree, per acre, dbh, etc.) or basing it on a valuation or performance measurement (e.g., canopy cover) approach. The next section provides research into the clarification of the mitigation fee ratio.

HISTORIC REFERENCE AND CLARIFICATION OF OPTION B MITIGATION FEE RATIO

This section reviews the history of the County's Option B mitigation fee ratio policy as described in the 2004 General Plan/DEIR, the CEQA Statement of Overriding Considerations, and the Motion for Review of County's Return to Writ of Mandate-Ruling. The intent of the mitigation ratio policy is to provide compensation for impacts resulting from the loss of habitat and fragmentation of oak woodlands due to development. The mitigation ratio policy is included in the Oak Woodland Management Plan (OWMP), which serves as the "oak woodland portion" of the Integrated Natural Resources Management Plan (INRMP) in accordance with General Plan Policy 7.4.2.8, General Plan Implementation Measure CO-P, and implementing Option B of General Plan Policy 7.4.4.4 (i.e., oak tree mitigation fees).

REGULATORY GUIDANCE & POLICY

As described earlier, regulatory guidance for the OWMP is derived from several sources. At the State level, SB1334 (Kuehl) addresses the issue of oak woodlands' environmental impacts under CEQA and provides a list of acceptable mitigation measures including, but not limited to, new plantings, conservation, and funding to the Oak Woodlands Conservation Fund.

On the local level, the policies of the 2004 General Plan and DEIR reflect the County's commitment to providing an in-lieu payment alternative as noted in the Court Ruling. The related General Plan policies and measures are summarized in the following table:

EL DORADO COUNTY 2004 GENERAL PLAN POLICY SUMMARY

Source	Page/Location	Policy/Measure	Summary
2004 General Plan DEIR	5.12-56 to 5.12-58	Mitigation Measure 5.12-1(d)	• Develop and implement an Integrated Natural Resources Management Plan (INRMP). • Directs County to add Policy 7.4.2.8 to the Conservation and Open Space Element of the General Plan.
2004 General Plan DEIR	5.12-60 to 5.12-61	Mitigation Measure 5.12-1(f)	• Requires mitigation for loss of woodland habitat. • Protects existing woodlands and compensates for loss of woodlands as a result of future development. • Provides greater flexibility to mitigate impacts. • Applies to smaller project sites with isolated patches of woodland. • Directs the replacement of Policy 7.4.4.4.

General Plan – Conservation and Open Space Element	292	Policy 7.4.1.6.	• Requires development projects under discretionary review to be designed to avoid disturbance or fragmentation of habitats to the extent possible. • Requires development to fully mitigate the effects of important habitat loss and fragmentation when avoidance is not possible. • Refers to the INRMP for definition of mitigation policy.
General Plan – Conservation and Open Space Element	294 to 296	Policy 7.4.2.8.	• Directs the development of the INRMP within five years of General Plan adoption • Development of conservation fund derived from grants, mitigation fees and County General Fund.
General Plan – Conservation and Open Space Element	298 to 299	Policy 7.4.4.4	• Requires mitigation as per the INRMP for development projects that result in soil disturbance on parcels that are (1) greater than one acre and have at least one percent canopy cover or, (2) less than one acre and have at least ten percent total canopy cover by woodland habitat. • Presents two mitigation options: Option A: tree canopy retention and replacement at a 1:1 ratio; or, Option B: contribution to INRMP conservation fund as described in Policy 7.4.2.8.
General Plan – Conservation and Open Space Element	298 to 299	Policy 7.4.4.4 Option B	• Compensates for the fragmentation and habitat loss of oak woodlands. • Provides preservation mitigation ratio of 2:1 based on the total woodland acreage onsite directly impacted by habitat loss and indirectly impacted by habitat fragmentation.
General Plan – Conservation and Open Space Element	299	Policy 7.4.5.1	• Provides basis for Oak Tree Preservation Ordinance • Requires tree survey and preservation and replacement plan to be filed with the County prior to the issuance of a grading permit for

			discretionary permits. • Requires that a Mitigation Monitoring Plan be incorporated when applicable.
General Plan – Conservation and Open Space Element	310	Implementation Program Measure CO-M	• Develop and implement an INRMP consistent with Policy 7.4.5.1.
General Plan – Conservation and Open Space Element	311	Implementation Program Measure CO-P	• Develop and adopt an Oak Resources Management Plan that addresses mitigation standards outlined in Policy 7.4.4.4, requirements for tree surveys and mitigation plans and Oak Tree Preservation Ordinance referenced in Policy 7.4.5.1.
General Plan – Conservation and Open Space Element	312	Implementation Program Measure CO-U	• Provide sufficient funding to the County's conservation fund to acquire and protect important habitat at a minimum 2:1 ratio in accordance with Policy 7.4.1.6. • Directs that mitigation fee would include costs associated with acquisition, restoration, and management of habitat.
CEQA Statement of Overriding Considerations	11	Exhibit A	• 2004 General Plan builds on the policies of the 1996 General Plan to provide important new resource protection policies and implementation tools, including: Standards for development and implementation of countywide INRMP; minimum mitigation ratios for loss of important biological habitat; and, minimum woodland habitat and tree preservation standards. (including Option A and Option B)

The 2004 General Plan DEIR contains analyses of impacts to oak woodlands and provides mitigation measures. The mitigation measures provide direction for policies contained in the Conservation and Open Space Element of the General Plan and for the development of an INRMP. General Plan Policy 7.4.4.4 of the Conservation and Open Space Element presents two mitigation alternatives including Option B, which allows for an in-lieu contribution to a conservation fund at a 2:1 ratio. However, none of the

policies and measures referenced above provides a clear interpretation or methodology of the mitigation ratio.

POSSIBLE RATIONALE FOR THE MITIGATION RATIO METHODOLOGY

Neither the DEIR nor the General Plan directly contains a particular methodology for how the 2:1 ratio was formulated. Nevertheless, a *possible* rationale for determining such a ratio is found in the DEIR. The DEIR states, "As with policies in the Conservation and Open Space Element, much of the focus of the measures in the implementation program is on identification of important biological resources and reduction of impacts on those resources." "Given the amount of habitat that is expected to be removed and fragmented by 2025, a substantial amount of compensatory mitigation (e.g., habitat purchased by the County to be preserved in perpetuity) would be needed in addition to avoidance and minimization measures to reduce this impact to a less-than-significant threshold" (EDAW, 2003, Page 5.12-48). Therefore, it appears that the 2:1 ratio was derived in large part to provide sufficient funding for the Conservation Fund to implement mitigation that would reduce impact from General Plan implementation to less than significant levels.

ATTEMPTS TO CLARIFY THE MITIGATION RATIO

Further attempts to clarify the mitigation ratio as reflected in the 2004 General Plan/ DEIR, Master Responses to Comments of the 2004 General Plan, the CEQA Statement of Overriding Considerations, and the Motion for Review of County's Return to Writ of Mandate-Ruling are presented below:

2004 El Dorado County General Plan

The most specific reference to the mitigation ratio found in the General Plan is expressed in Option B of Policy 7.4.4.4. The full text of Option B reads as follows:

> *The project applicant shall provide sufficient funding to the County's INRMP conservation fund, described in Policy 7.4.2.8, to fully compensate for the impact to oak woodland habitat. To compensate for fragmentation as well as habitat loss, the preservation ratio shall be 2:1 and based on the total woodland acreage onsite directly impacted by habitat loss and indirectly impacted by habitat fragmentation. The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8.*

The General Plan policy, derived from Mitigation Measure 5.12-1(f) in the DEIR, calls for compensation for habitat loss and fragmentation at a 2:1 ratio. This ratio is based upon the total woodland acreage onsite directly impacted by habitat loss and indirectly

impacted by habitat fragmentation. While the policy does not offer any clear interpretation of how the impacted woodland acreage would be assessed at the 2:1 ratio, an assumption could be made that the mitigation fees paid could reflect double the costs associated with acquisition, restoration, and management of habitat.

Master Responses to Comments of the 2004 General Plan

A number of comments to the General Plan addressed the issue of oak tree canopy protection and related policies and mitigation measures proposed in the DEIR. Master Response #18 included specific statements about Option B. The response stated that the intent of this option is "to preserve (through acquisition or conservation easements) existing woodlands of equal or greater biological value as those lost." The response goes on to include that "Option B… is designed to facilitate the preservation of larger blocks of contiguous habitat, generating at least twice as much funding for habitat protection as Option A." This appears to indicate that the mitigation ratio is designed to achieve a substantial amount of compensatory mitigation given the amount of habitat that is expected to be removed and fragmented in the future.

Motion for Review of Return to Writ of Mandate

The Sacramento County Superior Court affirmed PRC Section 21083.4(b)(3), which allows for the establishment of mitigation fees for oak woodland habitat preservation. *The Motion for Review of County's Return to Writ of Mandate - Ruling* (Superior Court of California, County of Sacramento dated August 31, 2005) found that *"the current DEIR proposed an alternative to the retention requirements, 'Option B', which allows the County to require a project applicant to provide funding for woodland preservation in lieu of on-site canopy retention. The preservation would be at 2:1 ratio and would allow the County to pool funds and apply them towards acquisition and restoration projects that would preserve larger contiguous blocks of habitat"* (Court Ruling, Page 5).

The Court Ruling upholds the General Plan's policy of establishing an in-lieu mitigation fee as reflected in Option B of Policy 7.4.4.4. Like the General Plan, the Court Ruling references the 2:1 mitigation ratio and describes the intent of the ratio as a means to fund habitat acquisition and restoration projects. However, the ruling does not offer any specific interpretation of the ratio.

CEQA Statement of Overriding Considerations

The CEQA Statement of Overriding Considerations associated with the adoption of the 2004 General Plan does not directly mention the 2:1 mitigation ratio. Under Environmental and Biological Considerations section, it does refer to "standards for development and implementation of countywide Integrated Natural Resources Management Plan" and "minimum mitigation ratios for loss of important biological habitat." However, this document does not offer any further direction or interpretation of the mitigation policy.

In sum, both the 2004 General Plan/DEIR and the Court Ruling provide policy direction for the implementation of the 2:1 mitigation ratio, which would include funding for habitat acquisition, restoration, and management. The CEQA Statement of Overriding Considerations only refers to a minimum mitigation ratio for loss of habitat without referencing a specific compensatory ratio. None of the aforementioned sources provides a clear interpretation of the mitigation ratio.

CONCLUSION

The County of El Dorado has established policies in its 2004 General Plan that not only address the retention and replacement of oak woodlands, but which also direct the establishment of a compensation fund based upon a 2:1 mitigation ratio. Option B references the mitigation ratio in terms of total acreage impacted on-site, but does not offer a clear interpretation of how such impacts would be assessed for the purposes of determining a mitigation fee structure. The findings contend that the project proponent would compensate for the full costs of mitigation based upon the total impacted acreage (direct and indirect) and the costs associated with the acquisition, restoration, management and monitoring of oak woodland habitat. For consistency with the General Plan language, the implementation of the fee would be based on total acreage impacted on-site, with the fee structured on a per acre basis. For each acre of oak woodland that is lost, the mitigation ratio of 2:1 would require payment of twice the fee per acre.

IV. ACQUISITION, RESTORATION, AND MANAGEMENT ALTERNATIVES

There are a number of potential alternatives for acquiring, restoring, and managing oak woodlands. Primary mechanisms for acquiring lands are to either gain control of land outright through fee title, or to restrict the use of land that remains in private ownership through voluntary conservation easement. In either case, the purpose of acquisition is to preserve land in perpetuity for conservation.

Restoration and management activities help to ensure the viability of the land to support oak tree growth and habitat functions. Depending on the existing condition of the land, the purpose and intensity of uses, and habitat quality, different levels of restoration and/or management would be needed. Activities include biological surveys, removal of non-native species, planting of oak seedlings and installation of fencing for seedling protection, fuels treatment and weed control.

Monitoring involves determining the on-going success of the off-site mitigation sites. Monitoring activities include annual field visits, photo documentation, tracking of oak tree mortality rates, and database management.

The following lists the various alternatives for acquisition, restoration, management and monitoring. The potential advantages and disadvantages of each are described in Exhibit A in the back of this Appendix.

ACQUISITION/LAND HOLDINGS:

- Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization
- Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.
- Williamson Act Land
- Farmland Security Zones
- Developer/Landowner Incentives
- Purchase Option
- Lease Purchase Option
- Sale/Lease Back
- Acquisition of Contiguous Blocks of Land For Ecological Preserves (habitat corridor development, land banking)
- Acquisition Of Non Contiguous Blocks (no habitat corridor development)
- Acquisition of Natural Undercrossings Along Roadway Improvements
- Donations of Land
- Land Swap/Exchange
- Bargain Sale (from land owner) to Land Trust
- Transfer of Development Rights
- Purchase of Development Rights
- Purchase of Subdivision Map Entitlements

RESTORATION/MANAGEMENT:

- Removal of Non-Native Plant Species
- Planting Native Species

- Weed Control
- Repair and Rehabilitation of Severely Degraded Riparian and Upland Habitats
- Removal of Structures That Impede Movement By Terrestrial Life
- Construction of Roadway Under and Overcrossing That Would Facilitate Movement By Terrestrial Life
- Installation of Erosion Control Measures
- No Restoration Activity
- Re-Planting for Given Mortality Rate
- Planting of Understory
- Planting of Various Sizes of Native Species (Seedling vs. Tree)
- Regular Upkeep of Site
- No Regular Upkeep of Site
- Fuels Treatment (e.g., prescribed burns, mechanical treatments (mastication), hand treatments, chipping, selective spray application)

MONITORING:

- Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.
- Short Term Less Aggressive Monitoring for first 7-10 years (e.g., every 5-10 years).
- Long Term Aggressive Monitoring (e.g., annually after first 7-10 years)
- Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)
- Self Monitoring and Reporting
- Random Monitoring
- No Monitoring

V. DEVELOPMENT OF POTENTIAL FEE STRATEGIES

Different evaluation criteria were developed by the consultant team, and reviewed by the Technical Advisory Committee, to begin considering the acquisition, restoration, and management alternatives from different perspectives. The criteria used for this assessment included:

- Ease of Implementation by El Dorado County
- Potential Cost
- Acceptance by Land Owners
- Resource Protection/Environmental
- Compatibility with General Plan Policies

These criteria support different perspectives on the desirability of the potential mitigation alternatives, including a County perspective, a private land owners/developer perspective, and a General Plan perspective. For example, the criteria "Ease of Implementation by El Dorado County" and "Potential Cost" support a County perspective of program implementation and public cost. The criterion "Acceptance by Land Owners" considers the mitigation alternative from the perspective of program acceptability by the private land owner. Finally, the criteria "Resource Protection/Environmental" and "Compatibility with General Plan Policies" support a perspective focused on the General Plan policies and guidance on oak woodland protection.

Each mitigation alternative is assigned a rating of "-", "o" or "+" ("-" indicates unfavorable condition relative to the criterion; "o" indicates neutral; and "+" indicates favorable). The rating worksheet of each alternative and the rationale for the assignment of each rating is described in Exhibit B of this Appendix. The rating of alternatives is then carried forward in the development of alternative mitigation fee strategies.

Proposed alternative mitigation and fee method strategies are developed to assist with the formulation of the Option B mitigation fee. The alternative strategies would serve as frameworks for developing the costs required for mitigation of oak woodlands and for assessing the functionality of mitigation alternatives to achieve program goals. In addition, the strategies are intended to provide the County with flexibility and choice in the derivation and implementation of the fee.

Using results from the alternatives assessment, alternative strategies were considered that emphasize different perspectives and interests. Four strategies were developed.

Strategy 1: This strategy emphasizes County interests (ease of implementation and program cost) with additional consideration for resource protection.

Strategy 2: This strategy also emphasizes County interests (ease of implementation and program cost) but with additional consideration for landowner/developer acceptance.

Strategy 3: This strategy emphasizes General Plan policy considerations (compatibility with General Plan Policies and resource protections) with additional consideration for County implementation.

Strategy 4: This strategy also emphasizes General Plan Policy considerations but with additional consideration for landowner/developer acceptance.

The four strategies were developed by selecting those mitigation alternatives that rated either "o" or "+" for each strategy component, indicating either a neutral or favorable position relative to that strategy. Alternatives that have a rating of "-", or unfavorable condition, for any of the three strategy components are not included as part of that strategy. The strategy development tables are contained in Exhibit C of this appendix.

The results from using this process to develop alternative mitigation strategies show that each strategy includes a variety of acquisition, restoration, management and monitoring alternatives. No two strategies include all of the same mitigation alternatives. The following compares the mitigation alternatives that appear in the strategies:

Acquisition/Land Holdings

	Strategy 1	**Strategy 2**	**Strategy 3**	**Strategy 4**
Acquisition/ Land Holdings	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization
	Strategy 1	**Strategy 2**	**Strategy 3**	**Strategy 4**

Acquisition/ Land Holdings	Williamson Act Land	Williamson Act Land	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.
	Farmland Security Zones	Farmland Security Zones	Williamson Act Land	Williamson Act Land
	Developer/Landowner Incentives	Developer/Landowner Incentives	Farmland Security Zones	Farmland Security Zones
	Lease Purchase Option	Lease Purchase Option	Developer/Landowner Incentives	Developer/Landowner Incentives
	Sale/Lease Back	Sale/Lease Back	Purchase Option	Purchase Option
	Donations of Land	Donations of Land	Lease Purchase Option	Lease Purchase Option
	Bargain Sale to Land Trust	Bargain Sale to Land Trust	Sale/Lease Back	Sale/Lease Back
	Transfer of Development Rights	Transfer of Development Rights	Donations of Land	Acquisition of Contiguous Blocks of Land For Ecological Preserves (habitat corridor development, land banking)
			Bargain Sale to Land Trust	Donations of Land
			Transfer of Development Rights	Land Swap/Exchange (Private Sector included?)
			Purchase of Development Rights	Bargain Sale to Land Trust
				Transfer of Development Rights
				Purchase of Development Rights

Restoration/Management

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Restoration/ Management	Removal of Non-Native Plant Species	Removal of Non-Native Plant Species	Removal of Non-Native Plant Species	Removal of Non-Native Plant Species
	Planting Native Species	Planting Native Species	Planting Native Species	Planting Native Species
	No Restoration Activity	No Restoration Activity	No Restoration Activity	Repair and Rehabilitation of Severely Degraded Riparian and Upland Habitats
	Re-Planting for Given Mortality Rate	Re-Planting for Given Mortality Rate	Re-Planting for Given Mortality Rate	Removal of Structures That Impede Movement By Terrestrial Life
	Planting of Understory	Planting of Understory	Planting of Understory	Construction of Roadway Under and Overcrossing That Would Facilitate Movement By Terrestrial Life
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	Planting of Various Sizes of Native Species (Seedling vs. Tree)	Planting of Various Sizes of Native Species (Seedling vs. Tree)	Installation of Erosion Control Measures
	Regular Upkeep of Site	Regular Upkeep of Site	Regular Upkeep of Site	No Restoration Activity
	No Regular Upkeep of Site	No Regular Upkeep of Site	Fuels Treatment	Re-Planting for Given Mortality Rate
	Fuels Treatment	Fuels Treatment		Planting of Understory
				Planting of Various Sizes of Native Species (Seedling vs. Tree)
				Regular Upkeep of Site
				Fuels Treatment

Monitoring

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Monitoring	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	Short Term Less Aggressive Monitoring for first 7-10 years (e.g., every 5-10 years).	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.
	Self Monitoring and Reporting	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	Long Term Aggressive Monitoring (e.g., annually after first 7-10 years)
	Random Monitoring	Self Monitoring and Reporting	Self Monitoring and Reporting	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)
		Random Monitoring	Random Monitoring	Self Monitoring and Reporting
		No Monitoring		Random Monitoring

Comparison of the different strategies resulted in a program with the following common elements:

ACQUISITION/LAND HOLDINGS:

- Conservation Easement
- Fee Title

RESTORATION/MANAGEMENT

- Planting of Oaks (seedlings)
- Removal of Non-Native Plant Species
- Weed Removal
- Fuels Treatment

MONITORING

- Annual monitoring.
- Long Term Less Aggressive Monitoring (e.g., every 10 years after first 10 years)

Each of these program elements was then integrated into the cost model to develop the program cost.

VI. ESTIMATED COSTS OF THE MITIGATION PROGRAM

The costs for acquisition, restoration, and management of oak woodlands were estimated using information from a variety of sources, including research by institutions such as the UC Integrated Hardwood Range Management Program (IHRMP); existing habitat conservation fee programs implemented by local jurisdictions; discussions with local land trusts that manage conservation easements; case studies compiled by the Center for Natural Lands Management; and research using the Metro Listing Services for recent land prices in El Dorado County. The information contained from each source assisted with building the range of estimated costs for each mitigation component (acquisition, restoration, management and monitoring).

A cost spreadsheet model was developed that incorporates the cost for each program element. The spreadsheet model is an adaptation of the Property Analysis Record (PAR) model developed by Center for Natural Lands Management, which is an industry accepted tool to derive mitigation costs that are applicable to the mitigation site. The model divides the cost variables into those costs that are considered initial capital costs (one time), and those that are considered on-going (annual) costs. The annual costs are dependent on the frequency or regularity of the on-going activities (e.g., annual monitoring versus less than annual monitoring).

There are key considerations and program cost assumptions that provide the underpinnings for the oak woodlands mitigation fee. They are listed below:

<u>Key Oak Woodlands Program Considerations</u>

- Provide compliance flexibility by allowing affected landowners to contribute to the offsite mitigation fund or to meet mitigation requirements by preserving comparable habitat.
- Designate areas for preservation or conservation of oak woodlands with high biological value.
- Establish an endowment that provides for on-going management/monitoring of mitigation sites. The endowment would ensure funds are available in perpetuity

(assuming a minimum investment rate of return) for these activities and that inflation cost adjustments are accounted for.

Program Costs And Fee Development Assumptions

- Basic fee unit: acreage.
- Cost categories of restoration include: Tree planting of oak seedlings and non native species removal.
- Cost categories for management include: biotic surveys; weed control; and fuels treatment.
- Cost categories for monitoring include: site monitoring and reporting; office and field equipment cost allocation, and endowment processing.
- Contingency and administrative overhead expressed as percentages of total costs (e.g., 10% for contingency and 20% for administration).
- A sampling of land acquisition costs within the priority conservation areas and habitat connectivity areas using the MLS during November 2006 through July 2007.
- Conservation easement values (relative to fee title) are on a sliding scale relative to acquisition acreage. Easement acquisitions less than 5 acres are valued at 90 percent of fee title; between 5 and 40 acres, valued at 50 percent of fee title; and over 40 acres, valued at 25 percent of fee title.
- Annual adjustment to the fee using appropriate indices, including changes in assessed land valuation recorded by the El Dorado County Assessor's Office, and wage rate changes in forestry and conservation related employment reported by the BLS for California.

Total cost of the off-site mitigation program is based on the acreage that is designated as priority conservation area and habitat connectivity area multiplied by the mitigation cost per acre.

Model Inputs

The cost spreadsheet model includes certain types of costs that are associated with long term stewardship of conservation property. These costs include consideration of the following:

Expenditure	Specification	Unit Type
Acquisition		

Fee Title Purchase	Parcel	Acre
Conservation Easement	Parcel	Acre
Attorney review of CE	Attorney review	Item
Site Inspection, coordination between County & landowner	Preserve manager	Labor hours
Survey by Land Surveyor	Report & Map	Item
Appraisal	Report	Item
Title Insurance	Report & Policy	Item
County Survey Map Processing	Government Services	Labor hours
Habitat Restoration		
Tree Planting/Replanting	Tree Seedling Installation	Item
Plant Protection Device	Screen Cage	Item
Non Native Species Removal	Non Native Species Removal	Labor hours
Biotic Surveys		
Qualified Professional	Species Surveys	Labor hours
Project Management	Supervision/Coordination	Labor hours
Survey Equipment	Equipment	Item
Habitat Management		
Weed Control	Spraying	Labor hours
Weed Control	Herbicide	Gallon
Fuels Treatment	Fire Prevention	Acre
Reporting/Monitoring		
Database Management	Report	Labor hours
Aerial Photos	Photos	Item
Photodocumentation	Field Survey/Site Evaluation	Labor hours
Office Maintenance		
Office Equipment/Computers	Desktop Computer Allocation	Item
Field Equipment		
Vehicle	Fuel & Maintenance	Mileage
Binoculars	Binoculars	Item
Chemical Sprayer	5 Gallon	Item
Operations		
Endowment	Process Endowment	Labor hours

Costs for restoration and management activities take into account such factors as the estimated hours of labor to provide the service, as well as an allocation of the use of a piece of equipment. For example, the cost of field and office equipment can be shared over a given number of mitigation projects. Therefore, only a marginal cost is applied to any single project. Hours of labor are estimated from case studies of other habitat conservation efforts on a per acre basis. In addition, to restore oak woodlands or to establish regeneration if and where it is lacking, the costs for planting of oak seedlings is

assumed to be 50 percent of the recommended replanting density, which equates to a rate of 100 seedlings per acre (Standiford, McCreary, and Frost (2002)).

Cost of mitigation includes annual site monitoring for the first 10 years. The cost model annualizes costs for activities that are undertaken at given intervals, such as every year, every 5 years, 10 years, etc. For example, an activity that costs $100 and is conducted every 5 years will have an annual cost of $20 in the model.

A sample of current land values in the PCA's and OWC's was collected using the MLS between November 2006 and July 2007 to provide approximations for fee title acquisition costs. Data from local land trusts such as the American River Conservancy was also collected through phone contact and electronic mail to provide approximations for conservation easement acquisition costs. Other conservation easement information was also collected from other land trusts including from the Amador Land Trust, Sacramento Valley Conservancy, Solano Land Trust, Yolo Land Trust, Wildlife Heritage Foundation and the Peninsula Open Space Trust. The sample data is presented in Exhibit D.

In general, for fee title acquisitions in the County, the price per acre decreases as the number of acres purchased increases. For example, based on agricultural land price data obtained from the MLS, for fee title purchase of under 5 acres, the average price per acre is about $83,000. For purchase of between 5 and 40 acres, the average price per acre decreases to about $26,000. For 40 acres or more, the average price per acre drops to about $9,000. These examples show that land purchase prices vary based on the number of acres included in the transactions. Residential zoned properties available for fee title acquisition were shown to have a much higher cost per acre versus agricultural property by more than double.

The value of conservation easements held by the American River Conservancy also varied. Two large easements along the Consumnes River (Garabaldi Ranch 1,178 acres, and Morales Ranch 1,815 acres) cost on average $1,060 per acre. However, other much smaller easements had a higher cost (Chili Bar $90,000 per acre for 4 acres, and North Fork of Consumnes $2,375 per acre for 80 acres). Easements in other counties, such as Solano, were estimated on average at about $6,000 per acre for transactions that involve prime farmland, rangeland and along freeways (higher end of the cost range). Easement costs are driven by the development potential on the property as valued by a qualified appraiser for the purchase of the development rights.

Other specific costs associated with each type of mitigation is shown in Exhibit E. Restoration and management costs are derived from case studies and provide estimated labor hours and itemized costs to provide these activities. To ensure that fee revenues are available to pay for on-going costs in perpetuity, an endowment fund was included in the monitoring cost. The endowment fund accounts for a substantial portion of the monitoring component of the fee because funding of the endowment must be sufficient to generate interest every year to avoid drawing down the principal investment to pay for on-going costs. In addition, the endowment must generate interest that is reinvested with

the principal to account for future cost increases due to inflation. The assumed interest rate of return in the fee structure is six percent (3 percent allocated toward on-going costs, and 3 percent reinvested for inflation adjustment).

To maintain flexibility in the implementation of the Option B program, costs were estimated separately for each mitigation component (acquisition, restoration, management and monitoring). This cost structure would enable an applicant to undertake certain mitigation activities on their own if they choose, and then pay only the remaining fee components. For example, the landowner/developer could acquire off-site land for mitigation, subject to County approval, in-lieu of paying the acquisition portion of the fee. The landowner/developer would then pay the County the balance of the fee for restoration, management and monitoring.

Summary of Costs/Fees

Three cost scenarios were developed based on several key assumptions, including the ratio of rural to urban acquisitions, the ratio of fee title to conservation easement acquisitions, and the level of restoration and on-going management. The tables below summarize the range of the mitigation cost components on a per acre basis under these assumptions:

Summary of Off-Site Mitigation Cost Scenarios
(Cost Per Acre)

Scenario	Low [1]	High [2]
#1 - 100% Rural Land Acquisition	$ 8,700	$ 20,000
#2 - 90% Rural/ 10% Urban Acquisition	$ 11,400	$ 24,700
#3 - 80% Rural/ 20% Urban Acquisition	$ 14,000	$ 29,300

(1) 100% conservation easement acquisition, and low ranges of restoration, management and monitoring costs.
(2) 100% fee title acquisition, and high ranges of restoration, management and monitoring costs.

Scenario #1 - 100% Rural Land Acquisition
(Cost Per Acre)

	Low	High
Acquisition [1]	$ 3,300	$ 12,500
Restoration [2]	$ 1,400	$ 2,500
Management	$ 1,400	$ 1,400
Monitoring [3]	$ 2,600	$ 3,600

Total Cost/Fee Per Acre [4]	$ 8,700	$ 20,000

(1) 100% conservation easement for low range of acquisition cost. 100% fee title for high range of acquisition cost. Assumes rural land acquisition of 40 acres and over.
(2) High range includes installation of oak seedling protection device (e.g., screen cage).
(3) Includes endowment for on-going monitoring (low range), and endowment for on-going restoration, management and monitoring (high range).
(4) 10% Contingency and 20% administration costs added to each cost component.

Scenario #2 - 90% Rural/10% Urban Land Acquisition (Cost Per Acre)

	Low	High
Acquisition [1]	$ 6,000	$ 17,200
Restoration	$ 1,400	$ 2,500
Management	$ 1,400	$ 1,400
Monitoring	$ 2,600	$ 3,600
Total Cost/Fee Per Acre	$ 11,400	$ 24,700

(1) 100% conservation easement for low range of acquisition cost. 100% fee title for high range of acquisition cost. Assumes rural land acquisition over 40 acres, and urban land acquisition between 5 and 40 acres.
(2) High range includes installation of oak seedling protection device (e.g., screen cage).
(3) Includes endowment for on-going monitoring (low range), and endowment for on-going restoration, management and monitoring (high range).
(4) 10% Contingency and 20% administration costs added to each cost component.

Scenario #3 - 80% Rural/20% Urban Land Acquisition (Cost Per Acre)

	Low	High
Acquisition [1]	$ 8,600	$ 21,800
Restoration	$ 1,400	$ 2,500
Management	$ 1,400	$ 1,400

Monitoring	$ 2,600	$ 3,600
Total Cost/Fee Per Acre	$ 14,000	$ 29,300

(1) 100% conservation easement for low range of acquisition cost. 100% fee title for high range of acquisition cost. Assumes rural land acquisition over 40 acres, and urban land acquisition between 5 and 40 acres.
(2) High range includes installation of oak seedling protection device (e.g., screen cage).
(3) Includes endowment for on-going monitoring (low range), and endowment for on-going restoration, management and monitoring (high range).
(4) 10% Contingency and 20% administration costs added to each cost component.

Scenario #1 assumes acquisition (conservation easement or fee title) is predominantly on rural land, which encompasses a proportion of the PCA's. Scenario #2 assumes acquisition is primarily on rural land, but includes a small proportion of acquisitions near urbanized areas or where development potential is higher, as shown by some of the PCA's and OWC's. Scenario #3 continues to assume acquisition is primarily on rural land, but assumes an increased proportion of acquisitions, relative to Scenario #2, where development potential is high, such as the Highway 50 North South Corridors.

From the above tables, and as described in Section VIII of the main report, to establish and maintain a viable program, this OWMP recommends implementation of Fee Scenario #3 (80% rural/20% urban) for mitigating oak woodland impacts.

VII. ADJUSTMENTS TO THE FEE

As costs for off-site mitigation grow over time, there would be a need to adjust the fee to closely match future cost increases. Provided that the fee structure is divided among the mitigation components (acquisition, restoration, management and monitoring), adjustments can be made according to appropriate measures that pertain to each of the components. For instance, the acquisition portion of the fee can be adjusted annually by the year-to-year change (or five or ten-year average change) in assessed valuation of County land as recorded by the County Assessor using the Property System Use Codes. Land uses excluded from the OWMP (e.g., commercial/industrial, community regions and rural centers, and low density residential) would not be included in the assessed valuation determination. According to the County Assessor data, from 1996 through 2006, total assessed land valuation for rural residential and farmland security zones increased on average by seven percent per year over the past ten years, and by nine percent over the past five years (2001 through 2006). The table below shows the change in assessed valuation for rural residential and farmland security zones.

Assessed Valuation for Rural Residential and Farmland Security Zones
1996 – 2006

Year	Valuation	Percent Change
1996	1,192,722,423	
1997	1,213,220,701	2%
1998	1,240,161,432	2%
1999	1,287,669,871	4%
2000	1,345,818,292	5%
2001	1,438,363,826	7%
2002	1,505,076,338	5%
2003	1,626,184,599	8%
2004	1,725,828,197	6%
2005	1,992,765,153	15%
2006	2,236,419,067	12%
Avg.		7%

Notes: Total valuation using Assessor Property System Use Codes 21-26, and 55.
Source: El Dorado County Assessor

Adjustments to the restoration, management and monitoring fees can be made according to the change in the State's mean wage rate for forestry and conservation related employment reported by the BLS. Provided that on-going management and monitoring costs are generally labor driven, changes in wage rates is an appropriate measure for the fees.

Five forestry and conservation related occupations reported by the BLS are identified and can be tracked for the change in wages for these occupations. The occupations include: Conservation scientists; Foresters; Forest and conservation technicians; First-line supervisors/managers of forestry workers; and Forest and conservation workers. According to BLS data specific to California, from 2000 through 2006, the average change in wages for these occupations was 2.2 percent per year.[1] The table below shows the change in wages for these related professions.

[1] The BLS contains separate wage data for Natural Scientists located in the Sacramento/Yolo area. However, this occupational heading is broad and does not specifically reflect forestry and conservation related professions.

Change in Wage Rates for Forestry and Conservation Related Employment
2000 - 2006

Conservation Scientists			
Occupational Code 19-1031			
Year	Hourly Wage	Salary	% Change
2000	$ 26.45	$ 55,010	
2001	$ 26.67	$ 55,470	0.8%
2002	$ 27.01	$ 56,180	1.3%
2003	$ 27.74	$ 57,700	2.7%
2004	$ 28.71	$ 59,720	3.5%
2005	$ 30.74	$ 63,930	7.0%
2006	$ 31.43	$ 65,370	2.3%
Average			2.9%

Foresters			
Occupational Code 19-1032			
Year	Hourly Wage	Salary	% Change
2000	$ 24.79	$ 51,570	
2001	$ 25.80	$ 53,660	4.1%
2002	$ 25.67	$ 53,390	-0.5%
2003	$ 27.71	$ 57,640	8.0%
2004	$ 28.69	$ 59,670	3.5%
2005	$ 23.16	$ 48,160	-19.3%
2006	$ 26.83	$ 55,810	15.9%
Average			1.9%

Forest and Conservation Technicians			
Occupational Code 19-4093			
Year	Hourly Wage	Salary	% Change
2000	$ 15.51	$ 32,260	
2001	$ 15.88	$ 33,040	2.4%
2002	$ 15.92	$ 33,110	0.2%
2003	$ 14.01	$ 29,140	-12.0%
2004	$ 14.77	$ 30,720	5.4%
2005	$ 15.21	$ 31,640	3.0%
2006	$ 16.93	$ 35,220	11.3%
Average			1.7%

First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers			
Occupational Code 45-1011			
Year	Hourly Wage	Salary	% Change

2000	$ 16.49	$ 34,300	
2001	$ 16.71	$ 34,750	1.3%
2002	$ 16.86	$ 35,070	0.9%
2003	$ 17.15	$ 35,670	1.7%
2004	$ 16.62	$ 34,570	-3.1%
2005	$ 15.62	$ 32,490	-6.0%
2006	$ 15.99	$ 33,270	2.4%
Average			-0.5%

Forest and Conservation Workers			
Occupational Code 45-4011			
Year	Hourly Wage	Salary	% Change
2000	$ 8.30	$ 17,270	
2001	$ 9.46	$ 19,670	13.9%
2002	$ 9.88	$ 20,540	4.4%
2003	$ 10.24	$ 21,290	3.7%
2004	$ 10.72	$ 22,300	4.7%
2005	$ 11.05	$ 22,980	3.0%
2006	$ 10.93	$ 22,730	-1.1%
Average			4.8%

Average Wage Growth of All Occupations: 2.2%

Source: Federal Bureau of Labor Statistics (BLS).

Appendix B Exhibits

Exhibit A – Mitigation Alternatives

Category	Acquisition/ Land Holdings	Potential Advantages	Potential Disadvantages
Alternatives	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	Outright ownership of land. Potential less complex transaction than other alternatives. Land can be used for replanting to reduce net loss of woodlands. Land can be used for conservation in perpetuity.	Potential high cost to acquire land. Off site mitigation that preserves existing habitat results in a net loss of woodlands, since off-site mitigation that protects existing habitat does not restore or create any new habitat to replace what was lost. Lost county property tax revenues would occur.
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	Treated by the IRS as a charitable gift by land owner. The value of the easement can be deducted against income taxes in the year in which it is granted; and any remaining value can be carried forward against tax liability for up to five more years. Flexibility for land owner to continue ag. or other use of land. Entity providing stewardship of the easement retains preservation rights in perpetuity.	Entity providing stewardship of the easement does not retain land ownership rights. Potential high cost to obtain easement. Effective public/private partnership required. Future land owners bounded by partnership and contract provisions. Tax benefit might not be as great as development potential. Reduced county property tax revenues collected.
	Williamson Act Land	Preservation of agricultural land for a rolling 10 years. Land owner receives assessed property tax valuation based on actual use rather than potential market value.	Land that is or will be designated as Ag. Preserve is eligible for Williamson Act contract. Land owner can choose to terminate contract, which would increase cost for the need to replace preserved land. Land might not be conserved in perpetuity. Active contract management by County can increase cost.

	Farmland Security Zones	Land restricted by a farmland security zone contract is valued for property assessment purposes at 65% of its Williamson Act valuation, or 65% of its Proposition 13 valuation, whichever is lower. Preservation of agricultural land for a rolling 20 years.	Land that is or will be designated as Ag. Preserve is eligible for Farmland Security Zone contract. Land owner can choose to terminate contract, which would increase cost for the need to replace preserved land. Land might not be conserved in perpetuity. Active contract management by County can increase cost. Subject land must be designated on the Important Farmland Series maps: Prime Farmland; Farmland of Statewide Importance; Unique Farmland; and Farmland of Local Importance.

Category	Acquisition/Land Holdings	Potential Advantages	Potential Disadvantages
	Developer/Landowner Incentives	Tax and other incentives are available from a variety of land alternatives: Easements, transfer of development rights, donations, etc.	Tax and other incentives might not be large enough for land owner to offset development potential. Internal Revenue Service (IRS) could withdraw tax incentives, creating possible need to replace preserved land or resulting in reduced inventory of available land for conservation. Increased cost to replace preserved land.
	Purchase Option	Entity has option to close on land purchase within 1 year.	Financing might not match 1 year requirement
	Lease Purchase Option	Land owner can lease land for one year to enable entity to close on land purchase up to 1 year after lease period.	Financing might not match additional 1 year requirement.
	Sale/Lease Back	Entity can receive on-going revenues to offset cost of purchase.	Potential high cost to acquire land. Lost county property tax revenues from use as preserved land.
	Acquisition of Contiguous Blocks of Land For Ecological Preserves (habitat corridor development, land banking)	Avoids piecemeal mitigation and takes advantage of economies of scale. Promotes ecological benefits in larger contiguous area.	Potential high cost to acquire land. Lost county property tax revenues from use as preserved land.
	Acquisition Of Non Contiguous Blocks (no habitat corridor development)	Can be in form of fee title, easement, donation, etc.	Potential high cost to acquire land. Might result in piecemealing mitigation. Lost county property tax revenues from use as preserved land.
	Acquisition of Natural Undercrossings Along Roadway Improvements	Promotes ecological benefits in contiguous area.	Potential high cost to acquire land.

	Donations of Land	Tax benefits to land owner. Low/no cost of land to public entity.	Land siting and/or required land improvements might not be in best interest of conservation. Lost county property tax revenues from use as preserved land.

Category	Acquisition/Land Holdings	Potential Advantages	Potential Disadvantages
	Land Swap/Exchange	Two or more entities exchange land to the mutual benefit of all parties. Land exchanged can be used for conservation in perpetuity. Can potentially form contiguous blocks for preserves.	Must identify land and entity willing to swap. Complex arrangement and time consuming. Might need to pass legislation to implement. Various guidelines and restrictions may apply depending on types of government involved.
	Bargain Sale to Land Trust	Lower acquisition cost. Sold at less than market value. Difference between selling price and market value may be deducted for tax purposes by land owner.	Land siting and/or required land improvements might not be in best interest of conservation. Still could have high cost to acquire land. Lost county property tax revenues from use as preserved land.
	Transfer of Development Rights	Alternative that enables land owner to transfer development rights from one property to another to maintain preservation value. Original land is recorded as a conservation easement, possibly in perpetuity. Developer is made whole. Development is not reduced.	Might require zone changes or other planning amendment/actions. Reduced county property tax revenues collected from preserved land.
	Purchase of Development Rights	Secures preservation of ag. land in perpetuity. Existing funding tool used by land trusts.	Potential high cost to acquire development rights. Reduced county property tax revenues collected.
	Purchase of Subdivision Map Entitlements	Can subdivide land and preserve balance of development and open space.	Entity providing stewardship of the easement does not retain land ownership rights. Potential high cost to

			obtain easement. Complex and not commonly used.

Category	Restoration/Management	Potential Advantages	Potential Disadvantages
Alternatives	Removal of Non-Native Plant Species	Reduced mortality rate. Increase ecosystem services	Could change ecosystem services. Higher cost
	Planting Native Species	Retention of mitigation standards. Increase ecosystem services	Need for retention of mitigation standards
	Repair and Rehabilitation of Severely Degraded Riparian and Upland Habitats	Retention of mitigation standards. Increase ecosystem services	Higher cost
	Removal of Structures That Impede Movement By Terrestrial Life	Retention of mitigation standards. Increase ecosystem services	Higher cost
	Construction of Roadway Under and Overcrossing That Would Facilitate Movement By Terrestrial Life	Retention of mitigation standards. Increase ecosystem services	Higher cost
	Installation of Erosion Control Measures	Retention of mitigation standards. Increase ecosystem services	Higher cost
	No Restoration Activity	Low cost	Potential increased mortality rates resulting in reduced mitigation. Reduce ecosystem services.
	Re-Planting for Given Mortality Rate	Retention of mitigation standards. Increase ecosystem services	Higher cost. Need for retention of mitigation standards.

Category	Restoration/Management	Potential Advantages	Potential Disadvantages
Alternatives	Planting of Understory	Increase ecosystem services	Higher cost
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	Retention of mitigation standards. Increase ecosystem services	Need for retention of mitigation standards
	Regular Upkeep of Site	Retention of mitigation standards. Reduced mortality rate. Increase ecosystem services	Higher cost and increased stewardship responsibility
	No Regular Upkeep of Site	Low cost and reduced burden on conservation entity	Potential increased mortality rates resulting in reduced mitigation. Reduce ecosystem services.
	Fuels Treatment	Reduce tree mortality and form fire breaks.	Higher cost

Category	Monitoring	Potential Advantages	Potential Disadvantages
Alternatives	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.	Reduction of mortality rate. Ensure negotiated provisions (of easement) are being met. Can determine whether conservation goals or mitigation requirements are met.	Higher cost. Greater burden on entity responsible for stewardship.
	Short Term Less Aggressive Monitoring for first 7-10 years (e.g., every 5-10 years).	Lower cost. Lesser burden on entity responsible for stewardship	Increased potential for higher mortality rate. Less monitoring of ecosystem development. More difficulty enforcing negotiated provisions (of easement). Could be more difficult to determine whether conservation goals are met.
	Long Term Aggressive Monitoring (e.g., annually after first 7-10 years)	Reduction of mortality rate. Ensure negotiated provisions (of easement) are being met. Can determine whether conservation goals or mitigation requirements are met.	Higher cost. Greater burden on entity responsible for stewardship.
	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	Lower cost. Lesser burden on entity responsible for stewardship.	Increased potential for higher mortality rate. Less monitoring of ecosystem development. More difficulty enforcing negotiated provisions (of easement). Could be more difficult to determine whether conservation goals are met.

	Self Monitoring and Reporting	Land owner/developer self monitors preserved land. Submits report every 5 years. Low/no cost to County. Holds private party accountable and responsible for habitat monitoring.	Might need to verify and inspect land owner/developer monitoring activities. Will need to develop and enforce penalty provisions for non-compliance. Increased costs for enforcement could offset monitoring cost savings by County.

Category	Monitoring	Potential Advantages	Potential Disadvantages
	Random Monitoring	Entity providing stewardship conducts unannounced random monitoring of preserved land. Cost savings from need for regular monitoring. Can monitor more land at reduced cost.	Increased potential for higher mortality rate. Less monitoring of ecosystem development. More difficulty enforcing negotiated provisions (of easement). Could be more difficult to determine whether conservation goals are met.
	No Monitoring	No/low cost. Lesser burden on entity responsible for stewardship.	Increased potential for higher mortality rate. No monitoring of ecosystem development. Difficulty enforcing negotiated provisions (of easement). More difficult to determine whether conservation goals are met.

Exhibit B – Assessment of Mitigation Alternatives
ACQUISITION/LAND HOLDINGS

		Ranking Legend: (-): Unfavorable, (o): Neutral, (+). Favorable									
		Ranking Criteria					**Rationale for Ranking**				
Category	**Acquisition/Land Holdings**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	+	-	+	+	+	Purchasing entity retains full right to the land. Simply involves purchase agreement and escrow process. Need to locate willing seller.	Potentially very expensive to purchase land and retain all land rights. Determined at fair market value by certified appraiser. Loss of property taxes.	Proven acquisition method.	Could be used for large acreage purchases for preservation in perpetuity. Public entity owner controls associated rights to any resources on the land.	Consistent with General Plan Policy 7.4.2.8.
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	o	o	+	+	+	Involves contract negotiations with landowner, valuation of development rights and agreement as to the continued use of land by landowner.	Might not be as expensive as fee title purchase. Generally involves purchase of development rights only. Property tax still paid by landowner	Proven conservation acquisition method. Provides greater flexibility for land owner to continue use of the land.	Could be used for large acreage purchases for preservation. Easement is acquired in perpetuity. Unless purchased, public entity does not control associated rights to any resources on the land.	Consistent with General Plan Policy 7.4.2.8.

	Williamson Act Land	+	o	+	o	o	Existing Act provisions adopted by County. When application is filed and approved by County, the land receives Exclusive Ag. (AE) or Ag. Preserve (AP) zoning.	No upfront acquisition cost for County, although active oversight of contracts is required and rezoning to Ag Preserve. Some property tax loss to the County from Williamson Act contract. Should contract be cancelled, cost to the County for potential preservation elsewhere might be high.	Proven program for voluntary land restriction for agriculture and open space uses.	Consistent with state conservation laws. Contract cancellation provisions could impact conservation status.	Uncertainty about using Williamson Act land for long term conservation.
	Farmland Security Zones	+	o	+	o	o	Existing Act provisions adopted by County. When application is filed and approved by County, the land receives Exclusive Ag. (AE) or Ag. Preserve (AP) zoning.	No upfront acquisition cost for County, although active oversight of contracts is required and rezoning to Ag Preserve. Some property tax loss to the County from Farmland Security Zone contract. Should contract be cancelled, cost to the County for potential preservation elsewhere might be high.	Proven program for voluntary land restriction for agriculture and open space uses.	Consistent with state conservation laws. Contract cancellation provisions could impact conservation status.	Uncertainty about using Farmland Security Zone land for long term conservation.

	Developer/Landowner Incentives	+	o	+	+	+	Tax incentives provided by State and Federal laws. County can use tax incentives to involve willing sellers, and conservation without selling land (e.g., easement).	Tax savings to landowner. Some loss of property tax revenue from preservation of land.	Primary feature for willing sellers of land, and conservation by land owners without selling land (e.g., easement).	Primary feature for willing sellers of land, and conservation by land owners without selling land (e.g., easement). Land can be acquired for conservation in perpetuity.	Consistent with General Plan Policy 7.4.2.8 of acquiring land that involves willing landowners.
	Purchase Option	o	-	o	+	+	Purchase option provides County up to 1 year to line up financing. Same purchase process as fee title.	Potentially very expensive to purchase land and retain all land rights. Must purchase the option which adds to total acquisition cost. Determined at fair market value by certified appraiser. Loss of property taxes.	Land owner can make additional revenue by selling the purchase option to the County.	Method to "buy time" if land is threatened from being conserved and funding is not immediately available.	Consistent with General Plan Policy 7.4.2.8 of acquiring land that involves willing sellers.
	Lease Purchase Option	o	o	o	+	+	Purchase option provides County up to 1 year to line up financing. Same purchase process as fee title.	County can generate revenue from lease during period of completing the acquisition. Potentially very expensive to purchase land and retain all land rights. Must purchase the option which adds to total acquisition cost. Determined at fair market value by certified appraiser. Loss of property taxes.	Land owner can make additional revenue by selling the purchase option to the County.	Method to "buy time" if land is threatened from being conserved and funding is not immediately available.	Consistent with General Plan Policy 7.4.2.8 of acquiring land that involves willing sellers.

	Sale/Lease Back	o	o	o	+	+	Purchasing entity retains full right to the land. Simply involves purchase agreement and escrow process. Leasing agreement to former land owner required.	County can generate long term revenue from lease. Potentially very expensive to purchase land and retain all land rights. Determined at fair market value by certified appraiser. Loss of property taxes.	Former land owner can continue to use the land under a lease. Former land owner is no longer tied to property and can move on. Lease can be cancelled by public land owner.	Could be used for large acreage purchases for preservation in perpetuity. Public entity owner controls associated rights to any resources on the land.	Consistent with General Plan Policy 7.4.2.8 of acquiring land that involves willing sellers.
	Acquisition of Contiguous Blocks of Land For Ecological Preserves (habitat corridor development, land banking)	-	-	o	+	+	Very difficult for acquisition of contiguous blocks of land, (depending on numbers of acres and number of willing sellers).	Potentially very expensive to purchase land and retain all land rights. Determined at fair market value by certified appraiser. Loss of property taxes.	Unwilling sellers could hamper acquisition of contiguous blocks.	Ideal conservation strategy for habitat corridor development and linkages to other preservation sites.	Consistent with habitat protection strategy goal of General Plan Policy 7.4.2.8.
	Acquisition Of Non Contiguous Blocks (no habitat corridor development)	o	-	o	o	-	Depends on acquisition method used by County such as fee title and easement.	Potentially very expensive to purchase land and retain all land rights. Determined at fair market value by certified appraiser. Loss of property taxes.	Need to locate willing sellers.	Can promote limited habitat protection. However, acquisition of non-contiguous blocks is less desirable.	Not consistent with habitat protection strategy goal of General Plan Policy 7.4.2.8.
	Acquisition of Natural Undercrossings Along Roadway Improvements	-	-	-	+	+	Very specific acquisition siting. Not many alternatives to undercrossings not acquired.	Potentially very expensive to purchase specific land. Loss of property taxes.	Need to locate willing sellers.	Complementary to habitat corridor development.	Consistent with General Plan Policy 7.4.2.8

	Donations of Land	+	+	+	+	+	Relatively simple process for donating land and turning over land title to County.	No/low cost to County for land donation as a gift.	Proven acquisition method.	Could be used for preservation in perpetuity. Public entity owner controls associated rights to any resources on the land.	Consistent with General Plan Policy 7.4.2.8.
	Land Swap/Exchange (Private Sector included?)	-	-	o	+	o	Could involve complex land swap between public agencies and potentially private sector.	Difficult to determine whether land swap is of equal value. Could have financial gainers and losers.	Most land swaps do not involve private land owners.	Land previously under state or federal ownership that is swapped can provide ideal habitat conservation.	Some consistency with General Plan acquisition strategy for identifying partnership opportunities.
	Bargain Sale to Land Trust	+	+	+	o	+	County partners with land trust to acquire land from land owner at bargain sale.	Lower cost than normal fee title acquisitions. Land transaction between land owner and County/land trust. Loss of property taxes.	Seller is willing to sell land at below market prices for tax savings purposes.	Could be used for preservation in perpetuity. Public entity owner partners with land trust.	Consistent with General Plan Policy 7.4.2.8
	Transfer of Development Rights	o	o	o	+	+	County can receive conservation easement but might need to rezone or make planning amendments for new land designated with development rights.	County might still need to purchase easement.	Not conducted by land owners on a regular basis. Land owners/developer concerns about being made whole.	Designated easement could be used for preservation in perpetuity.	Consistent with General Plan Policy 7.4.2.8 of acquiring easements.
	Purchase of Development Rights	o	-	+	+	+	Involves contract negotiations with landowner, valuation of development rights and agreement as to the continued use of land by landowner.	Potentially very expensive to purchase. Generally involves purchase of development rights only. Property tax still paid by landowner	Proven conservation acquisition method. Provides greater flexibility for land owner to continue use of the land.	Could be used for large acreage purchases for preservation. Easement is acquired in perpetuity. Unless purchased, public entity does not control associated rights to any	Consistent with General Plan Policy 7.4.2.8.

										resources on the land.	
	Purchase of Subdivision Map Entitlements	-	-	-	o	-	Likely complex structure for County	Potentially very expensive to purchase easement.	Not commonly used method.	Could have some habitat protection value	Uncertain about consistency with General Plan policies.

RESTORATION/MANAGEMENT

		Ranking Legend: (-): Unfavorable, (o): Neutral, (+). Favorable									
		Ranking Criteria					**Rationale for Ranking**				
Category	**Restoration/Management**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Removal of Non-Native Plant Species	+	+	o	+	+	Part of restoration activities	Relatively not very high depending on location/quantity of species to be removed.	General land owner acceptance, except if non-native species required for grazing or other ag. use.	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Planting Native Species	+	+	+	+	+	Part of restoration activities	Relatively not very high depending on location/quantity of species to be planted.	General land owner acceptance if does not interfere with private use (easement).	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Repair and Rehabilitation of Severely Degraded Riparian and Upland Habitats	-	-	o	+	+	Could involve high level effort to rehabilitate damaged habitats	Likely expensive for repair and restoration	General land owner acceptance. Repairs should improve site for landowner use as	Protects native species	Consistent with General Plan Policy 7.4.2.8.

									well.		
	Removal of Structures That Impede Movement By Terrestrial Life	-	-	o	+	+	Could involve high level effort.	Likely expensive for removal of structures	Dependent on structures and value to landowner.	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Construction of Roadway Under and Overcrossing That Would Facilitate Movement By Terrestrial Life	-	-	o	+	+	Could involve high level effort. Might need to be programmed in transportation CIP.	Likely expensive for roadway construction	Dependent on location of structure and impact to landowner use.	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Installation of Erosion Control Measures	-	-	+	+	+	Could involve high level effort.	Likely expensive to install controls, including grading and structures	General land owner acceptance if does not interfere with private use (easement).	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	No Restoration Activity	+	+	+	o	o	No action by County	No/low cost to County	Assumes status quo of land.	No action required if land does not require restoration efforts. Might already be protecting native species.	Not consistent with General Plan Policy 7.4.2.8. if land requires restoration but no effort taken.
	Re-Planting for Given Mortality Rate	+	+	+	+	+	Part of habitat management activities	Relatively not very high depending on mortality rate/location/quantity of species to be planted.	General land owner acceptance if does not interfere with private use (easement).	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Planting of Understory	+	+	+	+	+	Part of restoration activities	Relatively not very high depending on location/quantity of species to be planted.	General land owner acceptance if does not interfere with private use (easement).	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	+	+	+	+	+	Part of restoration activities	Relatively not very high depending on location/quantity of species to be planted.	General land owner acceptance if does not interfere with private use	Protects native species	Consistent with General Plan Policy 7.4.2.8.

									(easement).		
	Regular Upkeep of Site	o	o	o	+	+	Part of restoration activities. Aggressive upkeep could involve additional resources.	Dependent on degree of upkeep and activities undertaken.	General land owner acceptance if does not interfere with private use (easement).	Protects native species	Consistent with General Plan Policy 7.4.2.8.
	No Regular Upkeep of Site	+	+	+	o	-	No action by County	No/low cost to County	Assumes status quo of land.	No action required if land does not require management efforts. Might already be protecting native species.	Not consistent with General Plan Policy 7.4.2.8. if land requires regular upkeep but no effort taken.
	Fuels Treatment	o	o	o	+	+	Part of restoration activities to enhance tree sustainability.	Cost could vary by method of fuel treatment.	General acceptance if does not interfere with private use (easement)	Increases likelihood that mitigation standards are met.	Consistent with General Plan Policy 7.4.2.8.

MONITORING

		Ranking Legend: (-): Unfavorable, (o): Neutral, (+). Favorable									
		Ranking Criteria					**Rationale for Ranking**				
Category	**Monitoring**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.	o	-	o	+	+	Policies and procedures for monitoring would need to be developed. Requires annual effort at minimum.	Could be expensive for annual monitoring program.	General land owner acceptance if does not interfere with private use (easement).	Increases likelihood that mitigation standards are met.	Consistent with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10

											years.
	Short Term Less Aggressive Monitoring for first 7-10 years (e.g., every 5-10 years).	+	o	+	-	-	County will not need to conduct as much monitoring, and can allocate resources to other related uses.	Less expensive for less frequent monitoring, but could result in higher cost to upkeep site.	General land owner acceptance if does not interfere with private use (easement). Less frequent monitoring might be preferred by landowner.	Less likelihood to confirm that mitigation standards are met. Potential increase in mortality rate.	Not consistent with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10 years.
	Long Term Aggressive Monitoring (e.g., annually after first 7-10 years)	-	-	o	+	+	Will need to build mechanisms and processes to ensure long term monitoring by qualified staff.	Could be expensive for long term annual monitoring program.	General land owner acceptance if does not interfere with private use (easement).	Increases likelihood that mitigation standards are met.	Consistent with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10 years.
	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	+	o	+	o	o	County will not need to conduct as much monitoring, and can allocate resources to other related uses.	Less expensive for less frequent monitoring, but could result in higher cost to upkeep site.	General land owner acceptance if does not interfere with private use (easement). Less frequent monitoring might be preferred by landowner.	Less likelihood to confirm that mitigation standards are met. Potential increase in mortality rate.	Could be compatible with General Plan Measure CO-U assuming annual reporting the first 10 years.

	Self Monitoring and Reporting	o	+	o	o	o	Private sector burdened with monitoring; however, County will need to enforce monitoring program, allocate staff to review monitoring reports submitted by landowners, and likely still need to conduct field checks.	Costs absorbed by landowner for monitoring and reporting; however, cost to County for enforcement, review of reports, and field checks.	Land owner could accept responsibility for monitoring and reporting, but also accepts less, if any, field visits by County.	Depends on enforcement of monitoring and reporting requirements and cooperation of land owners.	Could be compatible with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10 years.
	Random Monitoring	+	o	o	o	o	Annul select monitoring easier than monitoring of all preserved sites.	Less expensive for less frequent monitoring, but could result in higher cost to upkeep site.	General land owner acceptance if does not interfere with private use (easement), and monitoring conducted fairly among all sites.	Less likelihood to confirm that mitigation standards are met. Potential increase in mortality rate.	Could be compatible with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10 years.
	No Monitoring	+	+	+	-	-	No action by County	No/low cost to County	Landowner acceptance if land owner not made worse off if restoration occurs but no monitoring	Decreases likelihood that mitigation standards are met.	Not consistent with General Plan Measure CO-U requiring, at a minimum, annual monitoring for the first 10 years.

Exhibit C -- Mitigation Fee Strategies

Mitigation Fee Strategy #1

Ease of Implementation by El Dorado County--Potential Cost-- Resource Protection/Environmental

		Rating Legend: (-): Unfavorable, (o): Neutral, (+): Favorable		
		Rating Criteria		
Category	**Acquisition/Land Holdings**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Resource Protection/ Environmental**
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	o	o	+
	Williamson Act Land	+	o	o
	Farmland Security Zones	+	o	o
	Developer/Landowner Incentives	+	o	+
	Lease Purchase Option	o	o	+
	Sale/Lease Back	o	o	+
	Donations of Land	+	+	+
	Bargain Sale to Land Trust	+	+	+
	Transfer of Development Rights	o	o	+
		Ranking Criteria		
Category	**Restoration/Management**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Resource Protection/ Environmental**
Alternatives	Removal of Non-Native Plant Species	+	+	+
	Planting Native Species	+	+	+
	No Restoration Activity	+	+	o
	Re-Planting for Given Mortality Rate	+	+	+
	Planting of Understory	+	+	+
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	+	+	+
	Regular Upkeep of Site	o	o	+
	No Regular Upkeep of Site	+	+	o
	Fuels Treatment (fire breaks)	o	o	+
		Ranking Criteria		
Category	**Monitoring**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Resource Protection/ Environmental**
	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	+	o	o
	Self Monitoring and Reporting	o	+	o
	Random Monitoring	+	o	o

Mitigation Fee Strategy #2
Ease of Implementation by El Dorado County--Potential Cost—
Acceptance by Land Owners

		Rating Legend: (-): Unfavorable, (o): Neutral, (+): Favorable		
		Rating Criteria		
Category	**Acquisition/Land Holdings**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	o	o	+
	Williamson Act Land	+	o	+
	Farmland Security Zones	+	o	+
	Developer/Landowner Incentives	+	o	+
	Lease Purchase Option	o	o	o
	Sale/Lease Back	o	o	o
	Donations of Land	+	+	+
	Bargain Sale to Land Trust	+	+	+
	Transfer of Development Rights	o	o	o
		Ranking Criteria		
Category	**Restoration/Management**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**
Alternatives	Removal of Non-Native Plant Species	+	+	o
	Planting Native Species	+	+	+
	No Restoration Activity	+	+	+
	Re-Planting for Given Mortality Rate	+	+	+
	Planting of Understory	+	+	+
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	+	+	+
	Regular Upkeep of Site	o	o	o
	No Regular Upkeep of Site	+	+	+
	Fuels Treatment (fire breaks)	o	o	o
		Ranking Criteria		
Category	**Monitoring**	**Ease of Implementation by El Dorado County**	**Potential Cost**	**Acceptance by Land Owners**
	Short Term Less Aggressive Monitoring for first 7-10 years (e.g., every 5-10 years).	+	o	+
	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	+	o	+
	Self Monitoring and Reporting	o	+	o
	Random Monitoring	+	o	o
	No Monitoring	+	+	+

Mitigation Fee Strategy #3
Ease of Implementation by El Dorado County-- Resource Protection/Environmental--
Compatibility with General Plan Policies

		Rating Legend: (-): Unfavorable, (o): Neutral, (+): Favorable		
		Rating Criteria		
Category	**Acquisition/Land Holdings**	**Ease of Implementation by El Dorado County**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	+	+	+
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	o	+	+
	Williamson Act Land	+	o	o
	Farmland Security Zones	+	o	o
	Developer/Landowner Incentives	+	+	+
	Purchase Option	o	+	+
	Lease Purchase Option	o	+	+
	Sale/Lease Back	o	+	+
	Donations of Land	+	+	+
	Bargain Sale to Land Trust	+	+	+
	Transfer of Development Rights	o	+	+
	Purchase of Development Rights	o	+	+
		Ranking Criteria		
Category	**Restoration/Management**	**Ease of Implementation by El Dorado County**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Removal of Non-Native Plant Species	+	+	+
	Planting Native Species	+	+	+
	No Restoration Activity	+	o	o
	Re-Planting for Given Mortality Rate	+	+	+
	Planting of Understory	+	+	+
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	+	+	+
	Regular Upkeep of Site	o	+	+
	Fuels Treatment (fire breaks)	o	+	+
		Ranking Criteria		
Category	**Monitoring**	**Ease of Implementation by El Dorado County**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.	o	+	+
	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	+	o	o
	Self Monitoring and Reporting	o	o	o
	Random Monitoring	+	o	o

Mitigation Fee Strategy #4

Acceptance by Land Owners-- Resource Protection/Environmental-- Compatibility with General Plan Policies

		Rating Legend: (-): Unfavorable, (o): Neutral, (+): Favorable		
		Rating Criteria		
Category	**Acquisition/Land Holdings**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Fee Title by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization	+	+	+
	Conservation Easement by State Land Management Agency, Federal Land Management Agency, Private Land Trust, Mitigation Bank, County, or by Other Public/Private Organization. Includes Open Space Easement by County.	+	+	+
	Williamson Act Land	+	o	o
	Farmland Security Zones	+	o	o
	Developer/Landowner Incentives	+	+	+
	Purchase Option	o	+	+
	Lease Purchase Option	o	+	+
	Sale/Lease Back	o	+	+
	Acquisition of Contiguous Blocks of Land For Ecological Preserves (habitat corridor development, land banking)	o	+	+
	Donations of Land	+	+	+
	Land Swap/Exchange (Private Sector included?)	o	+	o
	Bargain Sale to Land Trust	+	+	+
	Transfer of Development Rights	o	+	+
	Purchase of Development Rights	+	+	+
		Ranking Criteria		
Category	**Restoration/Management**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Removal of Non-Native Plant Species	o	+	+
	Planting Native Species	+	+	+
	Repair and Rehabilitation of Severely Degraded Riparian and Upland Habitats	o	+	+
	Removal of Structures That Impede Movement By Terrestrial Life	o	+	+
	Construction of Roadway Under and Overcrossing That Would Facilitate Movement By Terrestrial Life	o	+	+
	Installation of Erosion Control Measures	+	+	+
	No Restoration Activity	+	o	o
	Re-Planting for Given Mortality Rate	+	+	+
	Planting of Understory	+	+	+
	Planting of Various Sizes of Native Species (Seedling vs. Tree)	+	+	+
	Regular Upkeep of Site	o	+	+
	Fuels Treatment (fire breaks)	o	+	+
		Ranking Criteria		
Category	**Monitoring**	**Acceptance by Land Owners**	**Resource Protection/ Environmental**	**Compatibility with General Plan Policies**
Alternatives	Short Term Aggressive Monitoring (e.g., annually) for first 7-10 years.	o	+	+
	Long Term Aggressive Monitoring (e.g., annually after first 7-10 years)	o	+	+

	Long Term Less Aggressive Monitoring (e.g., every 5-10 years after first 7-10 years)	+	o	o
	Self Monitoring and Reporting	o	o	o
	Random Monitoring	o	o	o

Exhibit D – Sample Acquisition Costs

1. Sample Average Land Prices from Metro Listing Service, November 2006

	El Dorado Hills			
Acreage	Agricultural		Residential	
	Average Price	Price Per Acre	Average Price	Price Per Acre
1	$0	$0	$477,600	$477,600
5	$0	$0	$478,870	$95,774
10	$500,967	$50,097	$1,131,667	$113,167
20	$295,000	$14,750	$295,000	$14,750
40+	$524,333	$11,667	$2,961,000	$21,000

	Cameron Park			
Acreage	Agricultural		Residential	
	Average Price	Price Per Acre	Average Price	Price Per Acre
1	$0	$0	$899,000	$899,000
5	$450,000	$90,000	$622,667	$124,533
10	$472,000	$47,200	$689,600	$68,960
20	$0	$0	$0	$0
40+	$782,333	$9,008	$0	$0

	Diamond Springs			
Acreage	Agricultural		Residential	
	Average Price	Price Per Acre	Average Price	Price Per Acre
1	$0	$0	$274,000	$274,000
5	$0	$0	$428,500	$85,700
10	$0	$0	$292,833	$29,283
20	$0	$0	$550,000	$27,500
40+	$1,440,000	$4,515	$4,272,500	$29,947

	Placerville			
Acreage	Agricultural		Residential	
	Average Price	Price Per Acre	Average Price	Price Per Acre
1	$0	$0	$172,400	$172,400
5	$375,000	$75,000	$407,780	$81,556
10	$505,600	$50,560	$350,500	$35,050
20	$587,500	$29,375	$996,667	$49,833
40+	$2,272,980	$19,470	$3,747,600	$16,889

	North Area/Garden Valley			
Acreage	Agricultural		Residential	
	Average Price	Price Per Acre	Average Price	Price Per Acre
1	$0	$0	$165,000	$165,000
5	$0	$0	$233,280	$46,656
10	$195,500	$19,550	$270,580	$27,058
20	$0	$0	$265,000	$13,250
40+	$950,000	$15,493	$1,243,600	$9,575

El Dorado Hills										
	Agricultural									
Acreage	*1 acre*	*5 acres*	*Average Per Acre*	*10 acres*	*Average Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
	$0	$0	$0	$934,900	$93,490	$295,000	$14,750	$499,000	60	$8,370
			$0	$299,000	$29,900		$0	$499,000	40	$12,475
			$0	$269,000	$26,900		$0	$575,000	41	$14,156
			$0		$0		$0			
			$0		$0		$0			
Average Price	**$0**	**$0**		**$500,967**		**$295,000**		**$524,333**		
Average Price Per Acre	***$0***	***$0***		***$50,097***		***$14,750***				***$11,667***

Cameron Park/Shingle Springs										
	Agricultural									
Acreage	*1 acre*	*5 acres*	*Average Per Acre*	*10 acres*	*Average Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
	$0	$450,000	$90,000	$495,000	$49,500	$0	$0	$1,250,000	90	$13,889
			$0	$449,000	$44,900		$0	$599,000	98	$6,089
			$0		$0		$0	$498,000	71	$7,047
			$0		$0		$0			
			$0		$0		$0			
Average Price	**$0**	**$450,000**		**$472,000**		**$0**		**$782,333**		
Average Price Per Acre	***$0***	***$90,000***		***$47,200***		***$0***				***$9,008***

Diamond Springs										
	Agricultural									
Acreage	*1 acre*	*5 acres*	*Average Per Acre*	*10 acres*	*Average Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
	$0	$0	$0	$0	$0	$0	$0	$1,440,000	319	$4,515
			$0	$0	$0		$0			
			$0	$0	$0		$0			
			$0		$0		$0			
			$0		$0		$0			
Average Price	**$0**	**$0**		**$0**		**$0**		**$1,440,000**		
Average Price Per Acre	***$0***	***$0***		***$0***		***$0***				***$4,515***

Placerville										
	Agricultural									
Acreage	*1 acre*	*5 acres*	*Average Per Acre*	*10 acres*	*Average Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
	$0	$375,000	$75,000	$695,000	$69,500	$900,000	$45,000	$7,500,000	160	$46,875
			$0	$595,000	$59,500	$275,000	$13,750	$499,999	40	$12,500
			$0	$560,000	$56,000		$0	$439,900	40	$10,998
			$0	$379,000	$37,900		$0	$425,000	60	$7,083
			$0	$299,000	$29,900		$0	$2,500,000	126	$19,892
Average Price	**$0**	**$375,000**		**$505,600**		**$587,500**		**$2,272,980**		
Average Price Per Acre	***$0***	***$75,000***		***$50,560***		***$29,375***				***$19,470***

North County/Cool-Georgetown										
	Agricultural									
Acreage	*1 acre*	*5 acres*	*Average Per Acre*	*10 acres*	*Average Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
	$0	$0	$0	$262,000	$26,200	$0	$0	$1,400,000	138	$10,182
			$0	$129,000	$12,900		$0	$999,999	40	$25,000
			$0		$0		$0	$450,000	40	$11,298
			$0		$0		$0			
			$0		$0		$0			
Average Price	**$0**	**$0**		**$195,500**		**$0**		**$950,000**		
Average Price Per Acre	***$0***	***$0***		***$19,550***		***$0***				***$15,493***

El Dorado Hills									
Residential									
1 acre	*5 acres*	*Price Per Acre*	*10 acres*	*Price Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
$895,000	$899,950	$179,990	$1,500,000	$150,000	$295,000	$14,750	$2,961,000	141	$21,000
$395,000	$399,900	$79,980	$1,100,000	$110,000		$0			
$390,000	$395,000	$79,000	$795,000	$79,500		$0			
$299,000	$350,000	$70,000		$0		$0			
$409,000	$349,500	$69,900		$0		$0			
$477,600	**$478,870**		**$1,131,667**		**$295,000**		**$2,961,000**		
$477,600	***$95,774***		***$113,167***		***$14,750***				***$21,000***

Cameron Park/Shingle Springs									
Residential									
1 acre	*5 acres*	*Price Per Acre*	*10 acres*	*Price Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
$899,000	$900,000	$180,000	$1,490,000	$149,000	$0	$0	$0	40	0
	$529,000	$105,800	$595,000	$59,500		$0			
	$439,000	$87,800	$549,999	$55,000		$0			
		$0	$438,000	$43,800		$0			
		$0	$375,000	$37,500		$0			
$899,000	**$622,667**		**$689,600**		**$0**		**$0**		
$899,000	***$124,533***		***$68,960***		***$0***				***$0***

Diamond Springs									
Residential									
1 acre	*5 acres*	*Price Per Acre*	*10 acres*	*Price Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
$274,000	$495,000	$99,000	$300,000	$30,000	$550,000	$27,500	$8,000,000	150	$53,333
	$449,000	$89,800	$299,500	$29,950		$0	$545,000	83	$6,561
	$425,000	$85,000	$279,000	$27,900		$0			
	$345,000	$69,000				$0			
						$0			
$274,000	**$428,500**		**$292,833**		**$550,000**		**$4,272,500**		
$274,000	***$85,700***		***$29,283***		***$27,500***				***$29,947***

Placerville									
Residential									
1 acre	*5 acres*	*Price Per Acre*	*10 acres*	*Price Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
$299,000	$525,000	$105,000	$379,000	$37,900	$1,200,000	$60,000	$899,000	40	$22,702
$199,000	$479,900	$95,980	$369,000	$36,900	$1,100,000	$55,000	$159,000	40	$3,975
$150,000	$399,999	$80,000	$329,000	$32,900	$690,000	$34,500	$8,280,000	299	$27,692
$125,000	$349,000	$69,800	$325,000	$32,500		$0	$5,400,000	269	$20,074
$89,000	$285,000	$57,000		$0		$0	$4,000,000	400	$10,000
$172,400	**$407,780**		**$350,500**		**$996,667**		**$3,747,600**		
$172,400	***$81,556***		***$35,050***		***$49,833***				***$16,889***

North County/Cool-Georgetown									
Residential									
1 acre	*5 acres*	*Price Per Acre*	*10 acres*	*Price Per Acre*	*20 acres*	*Price Per Acre*	*40 acres +*	*Acreage*	*Price Per Acre*
$165,000	$345,900	$69,180	$295,000	$29,500	$440,000	$22,000	$3,700,000	220	$16,846
	$217,500	$43,500	$279,000	$27,900	$260,000	$13,000	$1,380,000	114	$12,073
	$215,000	$43,000	$269,500	$26,950	$225,000	$11,250	$599,000	80	$7,488
	$199,000	$39,800	$259,500	$25,950	$200,000	$10,000	$179,000	73	$2,469
	$189,000	$37,800	$249,900	$24,990	$200,000	$10,000	$360,000	40	$9,000
$165,000	**$233,280**		**$270,580**		**$265,000**		**$1,243,600**		
$165,000	***$46,656***		***$27,058***		***$13,250***				***$9,575***

2. Sample Land Prices from Metro Listing Service, July 2007

Cameron Park

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
4140 Cameron Road	5.31	$459,950	$86,620				
3090 Cambridge Road	0.67	$360,000	$537,313				
4981 Cameron Road	5.00	$435,000	$87,000				
3050 Cambridge Road	0.50	$450,000	$900,000				
305 Reid Court	1.38	$234,000	$169,565				
	2.57	**$387,790**	**$356,100**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Camino

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
5079 Alder Drive	1.27	$79,900	$62,913				
4921 Eight Mile Road	2.37	$125,000	$52,743				
3200 Meyers Road	3.81	$129,000	$33,858				
5164 Eight Mile Road	11.54	$204,000	$17,678				
790 Sky Ranch Lane	24.87	$695,000	$27,945				
	8.77	**$246,580**	**$39,027**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Cool

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
2 Stroker Way	1.73	$115,000	$66,474				
2085 Gravel Gulch Court	1.60	$179,000	$111,875				
1668 Cascade Trail	2.00	$189,000	$94,500				
4770 Meadowview Acres Ct.	5.00	$199,000	$39,800				
	2.58	**$170,500**	**$78,162**		**0.00**	**$0**	**$0**

El Dorado

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
3532 Majestic Trail	5.00	$225,000	$45,000	2 Freshwater Lane	318.97	$1,440,000	$4,515
1224 Log Town Lane	2.03	$237,000	$116,749	1800 Sandridge Road	40.00	$349,000	$8,725
2000 Lauren Lane	5.00	$35,000	$7,000	7630 Talcite Street	5.00	$415,000	$83,000
5 Monitor Court	5.02	$350,000	$69,721	5707 Maric Road	10.00	$360,000	$36,000
6869 Monitor Court	5.00	$395,000	$78,994				
1234 Quartz Drive	5.60	$399,000	$71,250				
4418 Mira Vista Court	5.03	$495,000	$98,410				
2 Kingvale Road	2.00	$250,000	$125,000				
	4.34	**$298,250**	**$76,515**		**93.49**	**$641,000**	**$33,060**

El Dorado Hills

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
441 Salmon Falls Road	5.29	$325,000	$61,437				
1111 Hillview Drive	1.81	$370,000	$204,420				
288 Salmon Falls Road	10.13	$395,000	$38,993				
121 Opus One Court	1.72	$395,000	$229,118				
7040 Beaver Pond Road	10.00	$500,000	$50,000				
4345 Screech Owl Creek	10.07	$545,000	$54,121				
	6.50	**$421,667**	**$106,348**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Garden Valley

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
2 Olympus Drive	2.01	$109,000	$54,229	6221 Garden Valley Road	137.50	$1,190,000	$8,655
5447 Whitney Court	2.00	$125,000	$62,500				
5679 Yellowbrick Road	5.00	$175,000	$34,979				
10 Kelley Place	10.02	$180,000	$17,964				
20 Bar Bach Road	20.12	$260,000	$12,922				
	7.83	**$169,800**	**$36,519**		**137.50**	**$1,190,000**	**$8,655**

Georgetown

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
3425 Volcanoville Road	42.48	$369,000	$8,686	10 Grey Eagle Road	10.09	$99,000	$9,812
11 Ringtail Road	11.45	$129,000	$11,266	6 Georgia Slide	5.80	$139,950	$24,129
3281 Chipmunk Trail	5.00	$310,000	$61,963				
40 Darling Ridge Road	40.00	$279,000	$6,975				
30 Paymaster Mine Road	30.01	$269,000	$8,964				
	25.79	**$271,200**	**$19,571**		**7.95**	**$119,475**	**$16,971**

Placerville

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
2600 Swansboro Road	2.43	$59,900	$24,650				
3436 Lupine Lane	5.04	$70,000	$13,889				
4801 Reservation Road	5.00	$324,900	$64,980				
5700 October Hill Road	20.00	$1,200,000	$60,000				
3301 Morel Way	1.03	$305,000	$296,117				
10 Green Valley Road	10.22	$375,000	$36,693				
3368 Greenwood Lane	10.00	$550,000	$55,000				
	7.67	**$412,114**	**$78,761**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Pilot Hill

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
31 Hound Hollow	40.62	$575,000	$14,156	8401 Ascension Lane	39.80	$499,000	$12,538
1111 Bridle Trail Lane	10.06	$399,500	$39,712				
1 Sarah Burner Road	5.00	$349,500	$69,900				
1 Pond View	8.26	$275,000	$33,293				
1 Soaring Hawk Lane	5.10	$185,000	$36,275				
	13.81	**$356,800**	**$38,667**		**39.80**	**$499,000**	**$12,538**

Shingle Springs

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
4401 Mother Lode Drive	42.64	$5,000,000	$117,261				
6100 Top Rail Court	9.84	$850,000	$86,382				
4701 Creekside Drive	19.88	$750,000	$37,726				
1 Sierrama Drive	5.05	$599,000	$118,614				
4120 Voyager Way	5.00	$439,500	$87,900				
4230 Rustling Pines Road	5.00	$325,000	$65,000				
2740 N. Shingle Road	5.71	$449,000	$78,634				
	13.30	**$1,201,786**	**$84,502**		**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Highway 50 North South Corridor Sample Land Prices

Residential				Agricultural			
Address	**Acres**	**Price**	**Price Per Acre**	**Address**	**Acres**	**Price**	**Price Per Acre**
4418 Mira Vista Court	5.03	$495,000	$98,410	5707 Maric Road	10.00	$360,000	$36,000
2 Kingvale Road	2.00	$250,000	$125,000				
4801 Reservation Road	5.00	$324,000	$64,761				
5700 October Hill Road	20.00	$1,200,000	$60,000				
3301 Morel Way	1.03	$305,000	$296,117				
10 Green Valley Road	10.22	$375,000	$36,693				
3368 Greenwood Lane	10.00	$550,000	$55,000				
4401 Mother Lode Drive	42.64	$5,000,000	$117,261				
4230 Rustling Pines Road	5.00	$325,000	$65,000				
2740 N. Shingle Springs Road	5.71	$449,000	$78,634				
	10.66	**$927,300**	**$99,687**		**10.00**	**$360,000**	**$36,000**

Other Agricultural Land Prices

Agricultural				
Address	**City/Town**	**Acres**	**Price**	**Price Per Acre**
1 Bumble Bee Lane	Camino	10.33	$775,000	$75,024
2 Freshwater Lane	El Dorado	318.97	$1,440,000	$4,515
6221 Garden Valley Road	Garden Valley	137.50	$1,190,000	$8,655
10 Grey Eagle Road	Georgetown	10.09	$99,000	$9,812
0 Bottlehill	Georgetown	25.86	$225,000	$8,701
20 Sciaroni	Grizzly Flats	20.00	$225,000	$11,250
40 Sciaroni	Grizzly Flats	40.00	$360,000	$9,000
8401 Ascension Lane	Pilot Hill	59.62	$499,000	$8,370
8401 Ascension Lane	Pilot Hill	39.80	$499,000	$12,538
5025 Bucks Bar Road	Placerville	80.00	$995,000	$12,438
2025 Carson	Placerville	20.00	$1,200,000	$60,000
9999 Trail Gulch Road	Placerville	160.00	$1,299,000	$8,119
3760 Cedar Ravine Road	Placerville	6.75	$249,000	$36,889
3220 Dawn Rose Lane	Placerville	80.00	$699,900	$8,749
6301 Lone Barn	Somerset	52.46	$947,000	$18,052
6140 Moco Canyon	Somerset	124.46	$1,900,000	$15,266

3. Sample Conservation Easement Costs

Land Trust	*Amador Land Trust*							
Property ID or APN	**Form of Conveyance/Title**	**Location**	**Acreage**	**Acquisition**	**Cost Per Acre**	**Restoration**	**Monitoring**	**Notes**
009-030-02	Conservation Easement	Sections 20 and 21 of Township 11 North, Range 13 East, MDM	160.00	Donated		None	Annually	Timberland Production Zone
100-010-04	Conservation Easement	Sections 7 and 8 of Township 11 North, Range 12 East, MDM	160.00	Donated		None	Annually	
046-022-21-100	Conservation Easement	Sections 2 and 11 of Township 9 North, Range 11 East, MDM						
046-280-42	Conservation Easement	Section 2 of Township 9 North, Range 11 East, MDM	264.00	Donated		None	Annually	
Land Trust	***American River Conservancy***							
Property ID or APN	**Form of Conveyance/Title**	**Location**	**Acreage**	**Acquisition**	**Cost Per Acre**	**Restoration**	**Monitoring**	**Notes**
Udvardy Trust	Conservation Easement	Lotus Road & Weber Creek	96.00	Donated				
Garabaldi Ranch	Conservation Easement	Main fork of Consumnes River between SR49 & Latrobe Road	1,178.00	$1,200,000	$1,019	*	*	* 12K set aside for restoration, monitoring & litigation
Morales Ranch	Conservation Easement	Between main and south forks of Consumnes River	1,815.00	$2,000,000	$1,102	*	*	* 12K set aside for restoration, monitoring & litigation
Chili Bar/089-180-23-100	Conservation Easement	Section 26 of Township 11 North, Range 10 East, MDM	4.00	$360,000	$90,000	*	*	* 12K set aside for restoration, monitoring & litigation
North Fork of Consumnes/046-032-41	Fee	Section 20 of Township 9 North, Range 11 East, MDM	80.00	$190,000	$2,375	*	*	* 12K set aside for restoration, monitoring & litigation
	Fee	Shingle Springs	10.00	Donated		*	*	* 12K set aside for restoration, monitoring & litigation
Land Trust	***The Nature Conservancy***							
Property ID or APN	**Form of Conveyance/Title**	**Location**	**Acreage**	**Acquisition**	**Cost Per Acre**	**Restoration**	**Monitoring**	**Notes**
Truckee River Canyon	Conservation Easement	Truckee River Canyon (Eastern Nevada/Sierra Counties)	3,344.00	$2,000,000	$598			
Land Trust	***Wildlife Heritage Foundation***							
Property ID or APN	**Form of Conveyance/Title**	**Location**	**Acreage**	**Acquisition**	**Cost Per Acre**	**Restoration**	**Monitoring**	**Notes**
Superior Self-Storage	Conservation Easement	2600 Cambridge Road, Cameron Park	0.25	Preserve conservator				
Land Trust	***Solano Land Trust***							
Property ID or APN	**Form of Conveyance/Title**	**Location**	**Acreage**	**Acquisition**	**Cost Per Acre**	**Restoration**	**Monitoring**	**Notes**
	Conservation Easement	Dixon Ridge Subarea			$3,900-$5,400 $10,000-$14,000			
	Conservation Easement	Winters			$3,000			
	Conservation Easement	Elmira			$2,600			
	Conservation Easement	Pleasant Valley			$700-$5,000			
	Conservation Easement	Suisun Valley			$5,000			
	Conservation Easement	Montezuma Hills			$700			

Land Trust	Conservation Easement	Acreage	Topography	Market Value	Market Value Per Acre	Easement Cost (Development Value)	Easement Cost Per Acre	Land Value	Land Value Per Acre
Sacramento Valley	Deer Creek Hills (fee	4,062	Oak woodlands/grazing	$11,000,000	$2,708	$0	$0	$11,000,000	$2,708

Conservancy	title)								
Solano Land Trust	Escano	237	Farmland	$1,400,000	$5,907	$925,000	$3,903	$475,000	$2,004
Solano Land Trust	Ebey-Laughtin Ranch	146	Farmland/Ranchland	$2,350,000	$16,096	$2,000,000	$13,699	$350,000	$2,397
Solano Land Trust	McConeghy Ranch	300	Farmland/Ranchland	$4,800,000	$16,000	$3,600,000	$12,000	$1,200,000	$4,000
Peninsula Open Space Trust	Bluebrush Canyon (fee title)	260	Ranchland	$3,200,000	$12,308	$0	$0	$3,200,000	$12,308
Peninsula Open Space Trust	Purisima Farms	534	Farmland	$3,942,500	$7,383	$1,200,000	$2,247	$2,742,500	$5,136
Peninsula Open Space Trust	Green Oaks Ranch (fee title)	13	Dairy Ranch/Farm	$1,210,000	$93,077	$0	$0	$1,210,000	$93,077

4. Acquisition Land Cost Options
Cost Per Acre

Agricultural			
	5 acres and under	5-40 acres	Over 40 acres
100% Fee Title	$ 82,750	$ 26,273	$ 9,308
100% Easement (1)	$ 74,475	$ 13,136	$ 2,327
90% easement/10% fee title	$ 75,303	$ 14,450	$ 3,025
80% easement/20% fee title	$ 76,130	$ 15,764	$ 3,723
50% easement/50% fee title	$ 78,613	$ 19,705	$ 5,817
20% easement/80% fee title	$ 81,095	$ 23,645	$ 7,911

Residential			
	5 acres and under	5-40 acres	Over 40 acres
100% Fee Title	$ 182,624	$ 44,607	$ 32,884
100% Easement (1)	$ 164,361	$ 22,304	$ 8,221
90% easement/10% fee title	$ 166,187	$ 24,534	$ 10,687
80% easement/20% fee title	$ 168,014	$ 26,764	$ 13,154
50% easement/50% fee title	$ 173,492	$ 33,456	$ 20,553
20% easement/80% fee title	$ 178,971	$ 40,147	$ 27,952

(1) Easement value assumed 90% of fee title for 5 acres and under; 50% for 5-40 acres; and 25% for over 40 acres.

Sample Estimated Land Prices Around El Dorado Hills, Cameron Park/Shingle Springs, Diamond Springs, Placerville, and North County/Cool/Georgetown

Source: MLS of Properties for Sale, November 2006. Updated MLS July 2007.

Exhibit E – Cost Model Results

Scenario #1 Low
Assumes 100% Rural Conservation Easement

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Conservation Easement	Parcel	Acre	40	$2,327	1	$93,075	0	$0
Attorney review of CE	Attorney review	item	1	$2,500.00	1	$2,500	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.99	1	$780	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$39.85	1	$797	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$40.72	1	$814	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Computer, printer, materials	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Conservation Easement						$196,979		$2,032
Contingency @ 10%						$19,698		$203
Administration @ 20%						$43,335		$447
Total Conservation Easement						**$260,012**		**$2,682**
Total Conservation Easement per Acre						$6,500		$67

Endowment Amount

Endowment Amount	**$89,398**		**$2,235**	Cost/acre
Capitalization Rate	3.0%			
Inflation	3.0%			
Investment Return	6.0%			

	Year 1 (After Funding)		Per Acre
Starting endowment	$89,398		$2,235
Investment Earnings	$5,364		$134
Annual expenditure	$2,682		$67
Inflation re-invested into endowment	$2,682		$67
Ending endowment balance	$92,080		$2,302

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Conservation Easement	**$8,735**

Scenario #1 High
Assumes 100% Rural Fee Title

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Fee Title Purchase	Parcel	Acre	40	$9,308	1	$372,300	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
Title Insurance	Report & Policy	Item	1	$1,000.00	1	$1,000	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Plant Protection Device	Screen Cage	Item	4000	$8.75	1	$35,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.99	1	$780	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$39.85	1	$797	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$40.72	1	$814	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Desktop Computer	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Fee Title						$509,704		$2,965
Contingency @ 10%						$50,970		$297
Administration @ 20%						$112,135		$652
Total Fee Title						**$672,809**		**$3,914**
Total Fee Title per Acre						$16,820		$98

Endowment Amount

Endowment Amount	**$130,468**		**$3,262**	Cost/acre
Capitalization Rate	3.0%			
Inflation	3.0%			
Investment Return	6.0%			

	Year 1 (After Funding)		Per Acre
Starting endowment	$130,468		$3,262
Investment Earnings	$7,828		$196
Annual expenditure	$3,914		$98
Inflation re-invested into endowment	$3,914		$98
Ending endowment balance	$134,382		$3,360

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Fee Title	**$20,082**

Scenario #2 Low
Assumes 90% Rural Conservation Easement/10% Urban Conservation Easement

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Conservation Easement	Parcel	Acre	40	$4,325	1	$172,982	0	$0
Attorney review of CE	Attorney review	item	1	$2,500.00	1	$2,500	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.99	1	$780	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$39.85	1	$797	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$40.72	1	$814	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Computer, printer, materials	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Conservation Easement						$276,886		$2,032
Contingency @ 10%						$27,689		$203
Administration @ 20%						$60,915		$447
Total Conservation Easement						**$365,489**		**$2,682**
Total Conservation Easement per Acre						$9,137		$67

Endowment Amount

Endowment Amount	**$89,398**		**$2,235**	Cost/acre
Capitalization Rate	3.0%			
Inflation	3.0%			
Investment Return	6.0%			

	Year 1 (After Funding)		Per Acre
Starting endowment	$89,398		$2,235
Investment Earnings	$5,364		$134
Annual expenditure	$2,682		$67
Inflation re-invested into endowment	$2,682		$67
Ending endowment balance	$92,080		$2,302

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Conservation Easement	**$11,372**

Scenario #2 High
Assumes 90% Rural Fee Title/10% Urban Fee Title

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Fee Title Purchase	Parcel	Acre	40	$12,837	1	$513,500	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
Title Insurance	Report & Policy	Item	1	$1,000.00	1	$1,000	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Plant Protection Device	Screen Cage	Item	4000	$8.75	1	$35,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.99	1	$780	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$39.85	1	$797	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$40.72	1	$814	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Desktop Computer	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Fee Title						$650,903		$2,965
Contingency @ 10%						$65,090		$297
Administration @ 20%						$143,199		$652
Total Fee Title						**$859,193**		**$3,914**
Total Fee Title per Acre						$21,480		$98

Endowment Amount

Endowment Amount	**$130,468**		**$3,262** Cost/acre
Capitalization Rate	3.0%		
Inflation	3.0%		
Investment Return	6.0%		

	Year 1 (After Funding)		Per Acre
Starting endowment	$130,468		$3,262
Investment Earnings	$7,828		$196
Annual expenditure	$3,914		$98
Inflation re-invested into endowment	$3,914		$98
Ending endowment balance	$134,382		$3,360

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Fee Title	**$24,742**

Scenario #3 Low
Assumes 80% Rural Conservation Easement/20% Urban Conservation Easement

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Conservation Easement	Parcel	Acre	40	$6,322	1	$252,890	0	$0
Attorney review of CE	Attorney review	item	1	$2,500.00	1	$2,500	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.99	1	$780	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$39.85	1	$797	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$40.72	1	$814	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Computer, printer, materials	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Conservation Easement						$356,793		$2,032
Contingency @ 10%						$35,679		$203
Administration @ 20%						$78,495		$447
Total Conservation Easement						**$470,967**		**$2,682**
Total Conservation Easement per Acre						$11,774		$67

Endowment Amount

Endowment Amount	**$89,398**		**$2,235**	Cost/acre
Capitalization Rate	3.0%			
Inflation	3.0%			
Investment Return	6.0%			

	Year 1 (After Funding)		Per Acre
Starting endowment	$89,398		$2,235
Investment Earnings	$5,364		$134
Annual expenditure	$2,682		$67
Inflation re-invested into endowment	$2,682		$67
Ending endowment balance	$92,080		$2,302

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Conservation Easement	**$14,009**

Scenario #3 High
Assumes 80% Rural Fee Title/20% Urban Fee Title

Expenditure	Specification	Unit Type	Unit Count	Unit Cost	Initial & Capital Years	Initial & Capital Costs	Ongoing Years	Ongoing Costs
Acquisition								
Fee Title Purchase	Parcel	Acre	40	$16,367	1	$654,699	0	$0
Site Inspection, coordination between County & landowner	Preserve manager	L. hours	20	$85.00	1	$1,700	0	$0
Survey by Land Surveyor	Report & Map	Item	1	$1,500.00	1	$1,500	0	$0
Appraisal	Report	Item	1	$1,500.00	1	$1,500	0	$0
Title Insurance	Report & Policy	Item	1	$1,000.00	1	$1,000	0	$0
County Survey Map Processing	Government Services	L. Hours	12	$80.00	1	$960	0	$0
Habitat Restoration								
Tree Planting/Replanting	Tree Seedling installation	Item	4000	$10.00	1	$40,000	0	$0
Plant Protection Device	Screen Cage	Item	4000	$8.75	1	$35,000	0	$0
Non Native Species Removal	Non Native Species Removal	L. hours	32	$35.00	1	$1,120	10	$112
Biological Surveys								
Qualified Professional	Species Surveys	L. Hours	40	$80.00	1	$3,200	10	$320
Project Management	Supervision/Coordination	L. Hours	16	$85.00	1	$1,360	10	$136
Survey Equipment	Equipment	Item	1	$1,000.00	1	$1,000	10	$100
Habitat Maintenance								
Weed Control	Spraying	L. Hours	32	$35.00	0	$0	5	$224
Weed Control	Herbicide	Gallon	5	$20.00	0	$0	5	$20
Fuels Treatment	Fire Prevention	Acre	40	$950.00	1	$38,000	0	$0
Reporting/Monitoring								
Database Management/Reporting	Report	L. Hours	24	$35.00	1	$840	1	$840
Aerial Photos	Photos	Item	1	$1,000.00	1	$1,000	5	$200
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.00	1	$700	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$35.76	1	$715	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$36.55	1	$731	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$37.34	1	$747	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$38.16	1	$763	0	$0
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Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$41.61	1	$832	0	$0
Photodocumentation	Field Survey/Site Evaluation	L. Hours	20	$42.52	1	$850	10	$85
Office Maintenance								
Office Equipment/Computers	Desktop Computer	Item	0.1	$2,000.00	1	$200	5	$40
Field Equipment								
Vehicle	Fuel & Maintenance	Mileage	150	$0.45	1	$67	1	$67
Binoculars	Binoculars	Item	1	$400.00	1	$400	5	$80
Chemical Sprayer	5 Gallon	Item	1	$107.00	1	$107	5	$21
Operations								
Endowment	Process Endowment	L. hours	24	$30.00	1	$720	1	$720
Subtotal Fee Title						$792,103		$2,965
Contingency @ 10%						$79,210		$297
Administration @ 20%						$174,263		$652
Total Fee Title						**$1,045,576**		**$3,914**
Total Fee Title per Acre						$26,139		$98

Endowment Amount

Endowment Amount	**$130,468**		**$3,262**	Cost/acre
Capitalization Rate	3.0%			
Inflation	3.0%			
Investment Return	6.0%			

	Year 1 (After Funding)		Per Acre
Starting endowment	$130,468		$3,262
Investment Earnings	$7,828		$196
Annual expenditure	$3,914		$98
Inflation re-invested into endowment	$3,914		$98
Ending endowment balance	$134,382		$3,360

Assumptions: Capitalization Rate is investment return less inflation.

Fee Per Acre for Fee Title	**$29,401**