

# - Oak Woodland Management Plan - Preliminary Mapping and Option B Fee

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# Purpose of Presentation

- Update the Status and Progress of the Oak Woodland Management Plan (OWMP)
- Review Key Assumptions, Criteria, and Rationale for Mapping and Option B Fee Methodology
- Discuss Preliminary Results of the Mapping and Range of Option B Fees Based on Existing General Plan Policies
- Begin to Identify Policy Questions for Next Workshop Before Completing the Mapping, Option B Fee Method, and Public Review Draft OWMP

# Presentation Outline

- I. Status and Progress of OWMP Preparation, Mapping, and Option B Fee Methodology
- II. Approach, Components, Conservation Priorities, and Results of Preliminary Mapping
- III. Policy Questions on Mapping for Next Workshop
- IV. Approach, Components, Variables, and Range of Preliminary Option B Fees
- V. Policy Questions on Option B for Next Workshop
- VI. Next Steps



**I. Status and Progress of OWMP Preparation, Mapping, and Option B Fee Methodology**

# Timeline for Completing OWMP



**County Staff TAC Meetings**



**OWMP Grant Application**



**OWMP Preparation**



**CEQA and General Plan Consistency Evaluations**



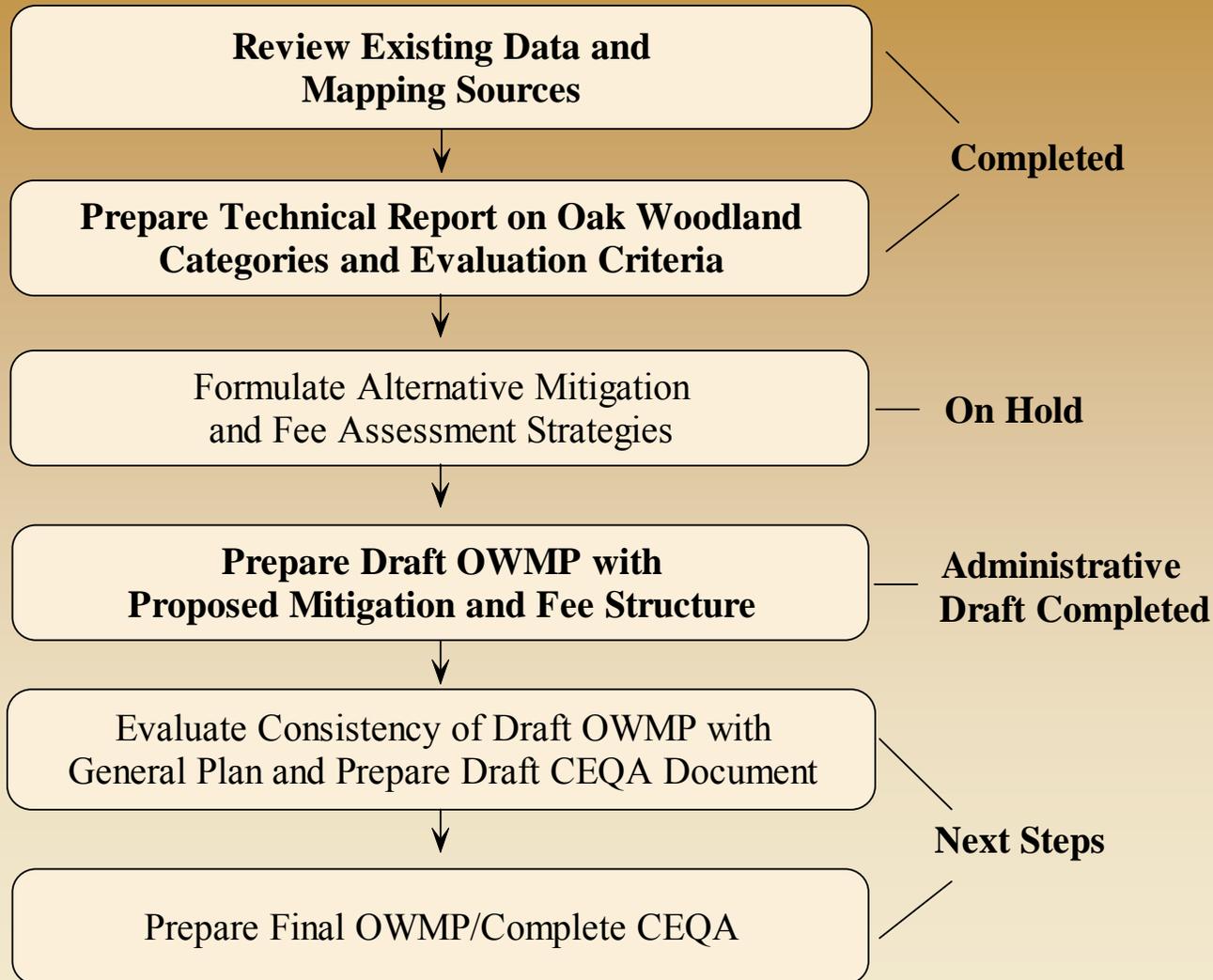
**Board of Supervisors' Status/Policy Guidance**



**Board of Supervisors' Approval**



# Progress on Oak Woodland Management Plan - Generalized Process -





# Progress on Identifying Important Oak Woodlands - Mapping Sequence-

## Completed

- Step 1: Start with Existing 2004 General Plan EIR Mapping
- Step 2: Review Other Available Mapping and Data Sources
- Step 3: Consider Best Available Information and Select ‘Importance Criteria’ Based on 2004 General Plan Policies/EIR and SB 1334/PRC 21083.4
- Step 4: Apply ‘Importance Criteria’ to General Plan EIR Mapping

## Preliminary Results Under Review

- Step 5: Assess Distribution of ‘Important Oak Woodland Habitat’ in El Dorado County
- Step 6: Recommend ‘Priority Conservation Areas’ for Meeting Oak Woodland Conservation Goals of 2004 General Plan for Mitigation Lands



# **Progress on Option B Fee - Methodology Development -**

## **Completed**

- Step 1: Develop Cost Estimates for Acquisition, Restoration, and Management Components
- Step 2: Evaluate Existing Policy and Alternative Fee Assessment Strategies
- Step 3: Identify Proposed Fee Methodology
- Step 4: Develop Range of Preliminary Fees for Acquisition, Restoration, and Management Components

## **Preliminary Results Under Review**

- Step 5: Evaluate Reasonableness of Range of Fees for Rural/Urban Settings and for Categories of Oak Woodland
- Step 6: Recommend Fee Range that Best Matches County Policy for Conservation of Designated Oak Woodland Categories



## **II. Approach, Components, Conservation Priorities, and Results of Preliminary Mapping**



# Preview of Mapping ‘Start’ and ‘End’ Points

Start – Existing Oak Woodland Types as Addressed in  
2004 General Plan, and

End – Preliminary Priorities for Conservation of Oak  
Woodland Categories

# **‘Start’ Map (Five WHR Oak Woodland Types)**

Insert Map 1

# **‘End’ Map (Priority Conservation Areas)**

Insert Map 7



# **Oak Woodland Management Plan**

## **- Purposes -**

- To Fulfill the Requirements of General Plan Implementation Measure CO-P
- To Develop the Policy 7.4.4.4 Option B Fee Method for Mitigating Impacts to Oak Woodlands
- To Establish a Conservation Plan that Is the Initial Oak Woodland Component of the County's INRMP under General Plan Policy 7.4.2.8, and Is Consistent with the CA Oak Woodland Conservation Act



# **Oak Woodland Management Plan**

## **- Draft Key Conservation Objectives -**

- 1) Delineate Large Expanses – Native Oak Woodlands (500-Acre Minimum)**
- 2) With Interconnecting Corridors – At Least Two Oak Woodland Corridors (at Least 300-500 Feet Wide) that Interconnect Each Large Expanse**
- 3) To Preserve/Manage Important Habitat and Offset Habitat Loss and Fragmentation (Policy 7.4.2.8 and Measure CO-U) – Acreages and Habitat Values of Oak Woodland at 2004 General Plan Levels**



# Oak Woodland Mapping Approach

- **Focus** – Regional/Landscape-Level (Not Project-Level) to Identify Areas for Oak Woodland Conservation/Restoration Using Option B and Other Local, State, and Federal Funding
- **Standards** – Best Available Information and Objective, Replicable, and Supportable Process
- **Criteria** – Woodland Data/Mapping Based on 2004 General Plan Conservation Policies (e.g., 7.4.1.6, 7.4.2.2, and 7.4.2.8)
- **Emphasis** – Consistency with Other Policies of the 2004 General Plan



# Oak Woodland Mapping Approach (Continued)

## Oak Woodland Defined

- Oak Stand with Greater Than 10 Percent Canopy Cover or that May Have Historically Supported Greater Than 10 Percent Canopy Cover (Oak Woodland Conservation Act, Fish and Game Code Section 1361)
- Five Oak Woodland Wildlife Habitat Relationship (WHR) Types that Provide Diverse Oak Woodland Habitat Values (Areas Below 4,000 Feet Elevation)



# Oak Woodland Mapping Approach (Continued)

## Important Habitat Defined

- Conserve and Restore Contiguous Blocks of Important Habitat to Offset Effects of Increased Habitat Loss and Fragmentation Elsewhere (Policy 7.4.2.8):
  - Habitats that Support Special Status Species
  - Aquatic Environments Including Streams, Rivers, and Lakes
  - Wetland and Riparian Habitat
  - Important Habitat for Migratory Deer Herds, and
  - Large Expanses of Native Vegetation



# Oak Woodland Mapping Approach (Continued)

## Existing/Potential Fragmentation Defined

- Fragmentation – Development within Contiguous Habitat (e.g., Large Expanses) that Creates Smaller Units, which Results in Habitat Degradation
- Existing Fragmentation – Developed Parcels (Based on Improvements)
- Potential Fragmentation – Future Development of Parcels Considering Underlying Land Use Designations (e.g., Potential for Subdivision or Change in Use)



# Oak Woodland Conservation Mapping

## “Delineate Large Expanses”

- Large Expanses (500-Acre Minimum) of Contiguous Oak Woodland that Have Limited Existing and Potential for Fragmentation
- Existing Developed Parcels Are Predominantly  $\geq 40$  Acres



# Oak Woodland Conservation Mapping (Continued)

## “With Interconnecting Corridors”

- “Riparian” and “Non-Riparian” Corridors that Connect Large Expanses of Oak Woodland
- Minimum of 300 to 500 Feet Wide
- Riparian Corridors Include Perennial Streams
- “Critical” Corridors – Riparian/Non-Riparian Links Between Large Expanses that Face Imminent Fragmentation (e.g., Weber Creek)



# Oak Woodland Conservation Mapping (Continued)

## “To Preserve/Manage Important Habitat and Offset Habitat Loss and Fragmentation”

- Oak Woodland Management Plan (OWMP) as Initial Component of Integrated Natural Resources Management Plan Based on Policy 7.4.2.8
- OWMP Designation of **Priority Conservation Areas**, Including **Important Oak Woodland Habitat**, as Basis for Implementing Option B Fee Mitigation Method as Provided by Policy 7.4.4.4



# Conservation Mapping Categories

## Important Oak Woodland Habitat Defined

- **Valley Oak Woodland:** General Plan Designation as “Sensitive Habitat”
- **Large Expanses:** Size, Continuity, and Limited Potential for Fragmentation
- **Riparian Oak Woodland Corridors:** Habitat Values and Importance of Streams to Wildlife
- **Critical Corridors:** Two or Fewer Connecting Corridors for Species Movement Between Large Expanses

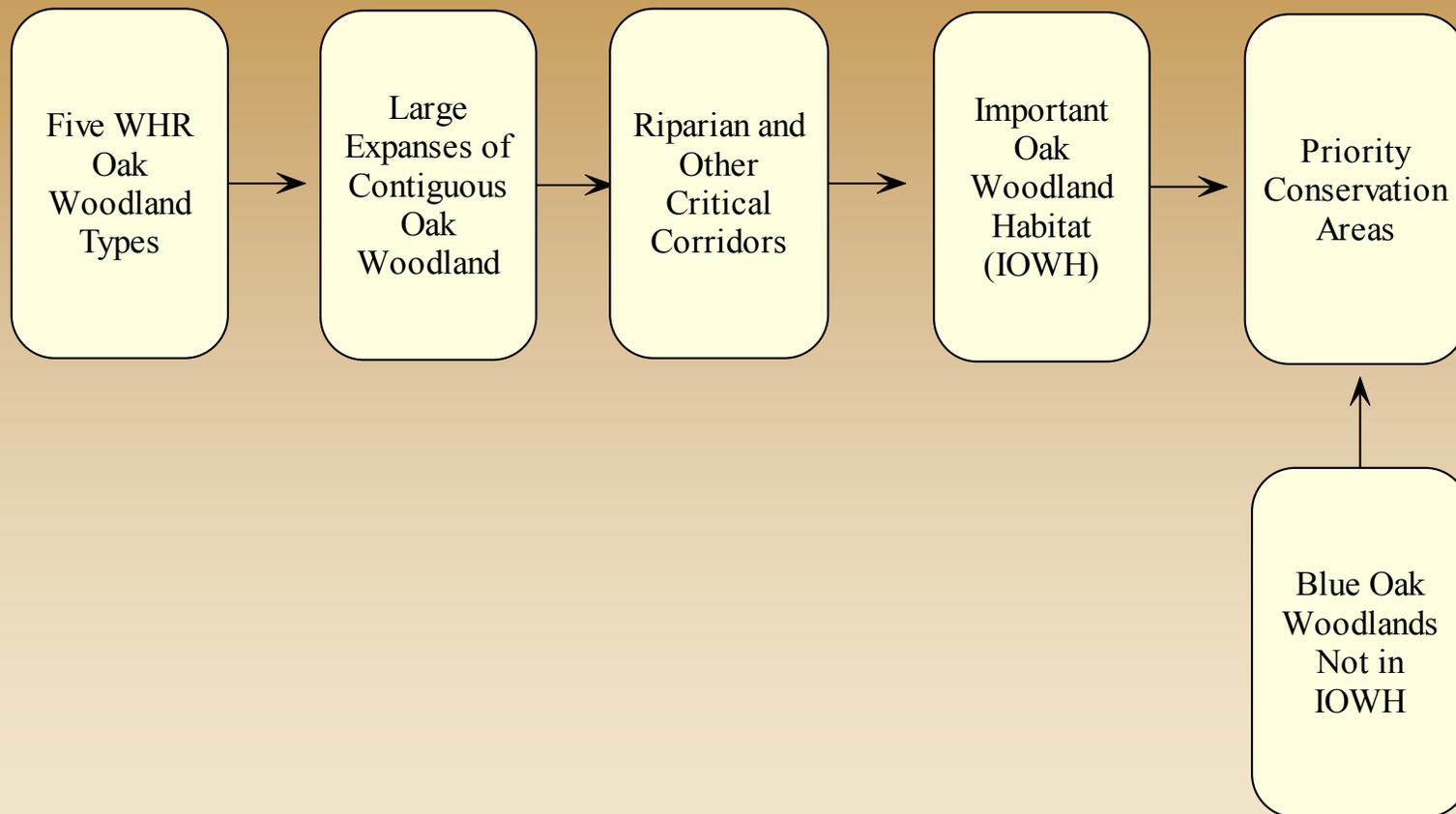


# Conservation Mapping Categories (Continued)

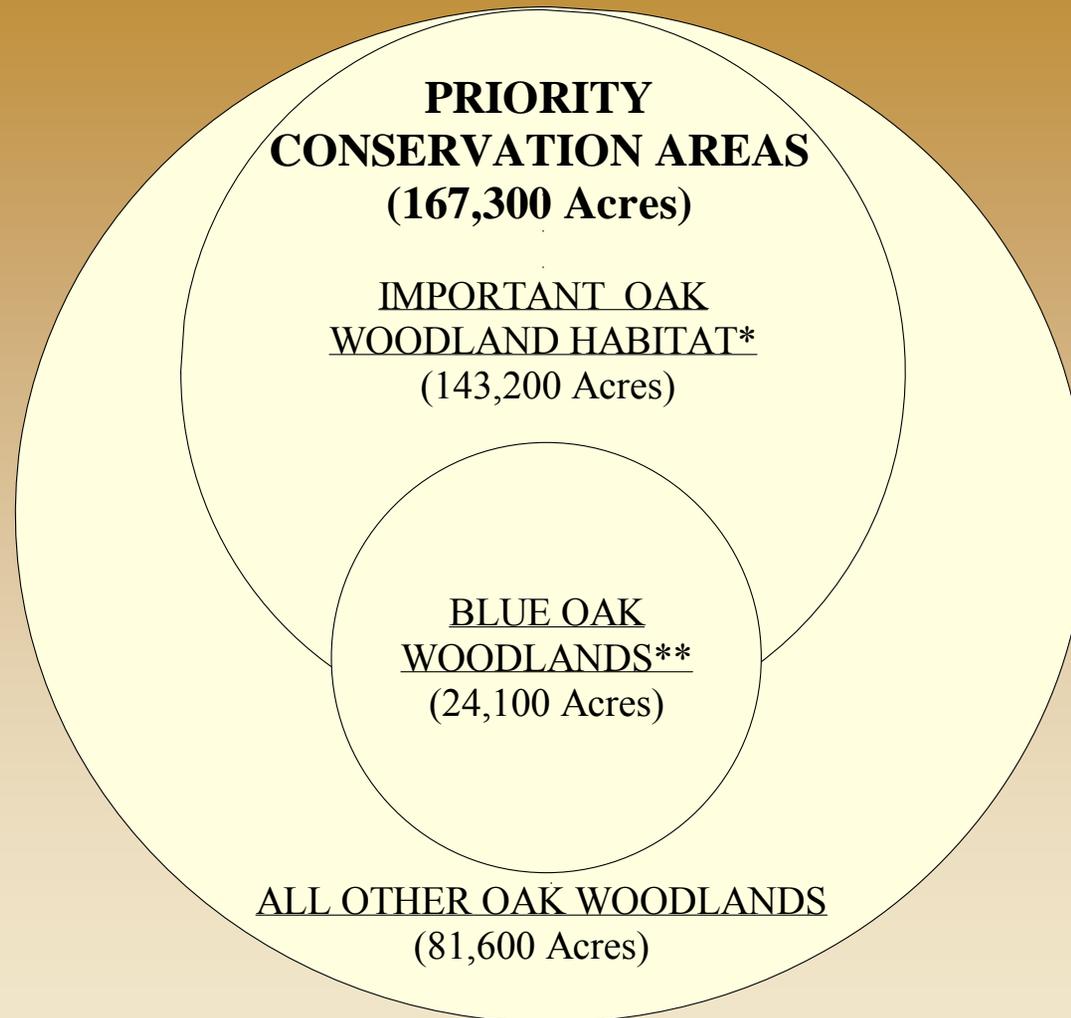
## Priority Conservation Areas Defined

- **Important Oak Woodland Habitat:** Valley Oak Woodland, Large Expanses of Oak Woodland, Riparian Oak Woodland Corridors, and Critical Corridors
- **Blue Oak Woodlands:** Blue Oak Woodland and Blue Oak – Foothill Pine (Low Rate of Regeneration in El Dorado County)

# Designating Important Oak Woodland Habitat and Other Priority Conservation Areas



# Conservation Priorities for Oak Woodlands (IOWH and Blue Oak Woodlands)



\*Based on Existing General Plan Policies Including 7.4.1.6, 7.4.2.2, and 7.4.2.8

\*\*Based on Low Success Rates for Regeneration in El Dorado County



# Map 1: “Start – Existing Oak Woodland Types as Addressed in 2004 General Plan”

- Five Oak Woodland Wildlife Habitat Relationship (WHR) Types that Provide Diverse Oak Woodland Habitat Values

# Map 1 – FRAP WHR Oak Woodland Types

- Insert Map



## Map 2 – Large Expanses of Oak Woodland

- Large Expanses (500-Acre Minimum) of Contiguous Oak Woodland that Have Limited Existing and Potential for Fragmentation

# Map 2 – Large Expanses of Oak Woodland

- Insert Map



## Map 4 – Model Score of Existing Oak Woodland Based on Large Expanses, Undeveloped Land, and Parcel Size

### Point Scores Assigned to WHR Types:

- 5 Points if Existing Large Expanse (i.e.,  $\geq 500$  acres), 0 Points if Not Large Expanse
- 5 Points if Undeveloped and 0 Points if Developed (Substantial Improvements)
- 1 to 5 Points Assigned According to Parcel Acreage (>40 is 5 Points; between 20 and 40 is 4 Points; between 10 and 20 is 3 Points; between 5 and 10 is 2 Points; <5 is 1 Point)



## **Map 4 – Model Score of Existing Oak Woodland Based on Large Expanses, Undeveloped Land, and Parcel Size**

- Insert Map



## **Map 5 – Model Score of Future Oak Woodland Based on Large Expanses, Undeveloped Land, and Land Use Designations**

### Point Scores Assigned to WHR Types:

- 5 Points if Existing Large Expanse (i.e.,  $\geq 500$  acres),  
0 Points if Not Large Expanse
- 5 Points if Undeveloped and 0 Points if Developed  
(Substantial Improvements)
- 1 to 5 Points Assigned According to General Plan  
Underlying Land Use Designation (e.g., Industrial=1  
Point, Low-Density Residential=2 Points, Rural  
Residential=4 Points, Natural Resource=5 Points)



## **Map 5 – Model Score of Future Oak Woodland Based on Large Expanses, Undeveloped Land, and Land Use Designations**

- Insert Map



# Map 6 – Important Oak Woodland Habitat (Without Corridors)

## Important Oak Woodland Habitat Defined

- **Valley Oak Woodland:** General Plan Designation as “Sensitive Habitat”
- **Large Expanses:** Size, Continuity, and Limited Potential for Fragmentation
- **Riparian Oak Woodland Corridors (to be delineated):** Habitat Values and Importance of Streams to Wildlife
- **Critical Corridors (to be delineated):** Two or Fewer Connecting Corridors for Species Movement Between Large Expanses



# Map 6 – Important Oak Woodland Habitat (Without Corridors)

- Insert Map



# Map 7 – Preliminary Priority Conservation Areas (Without Corridors)

## Priority Conservation Areas Defined

- **Important Oak Woodland Habitat:** Valley Oak Woodland, Large Expanses of Oak Woodland, Riparian Oak Woodland Corridors, and Critical Corridors
- **Blue Oak Woodlands:** Blue Oak Woodland and Blue Oak – Foothill Pine (Low Rate of Regeneration in El Dorado County)



# Map 7 – Preliminary Priority Conservation Areas (Without Corridors)

- Insert Map



## **Map 8 – Important Oak Woodland Habitat with Existing Natural Resource, Agricultural District, and Other Open Space Designations**

- Important Oak Woodland Habitat with Overlay of Existing Land Use/Resource Protection Designations:
  - Agricultural Districts
  - Important Biological Corridors
  - Ecological Preserves
  - Natural Resource
  - Open Space



## **Map 8 – Important Oak Woodland Habitat with Existing Natural Resource, Agricultural District, and Other Open Space Designations**

- Insert Map



## **Map 9 – Priority Conservation Areas with Existing Natural Resource, Agricultural District, and Other Open Space Designations**

- Preliminary Priority Conservation Areas with Overlay of Existing Land Use/Resource Protection Designations:
  - Agricultural Districts
  - Important Biological Corridors
  - Ecological Preserves
  - Natural Resource
  - Open Space



# **Map 9 – Priority Conservation Areas with Existing Natural Resource, Agricultural District, and Other Open Space Designations**

- Insert Map



## Next Steps for Mapping

- Receive Input on Priority Conservation Area Designations for Important Oak Woodland Habitat and Blue Oak Woodlands Not Within Important Habitat
- Receive Input on Criteria and Categories for Corridors that Will Interconnect Large Expanses
- Complete Mapping of Priority Conservation Areas and Corridors for Preparing Public Review Draft of OWMP



### **III. Policy Questions on Mapping for Next Workshop**



## Policy Questions on Mapping

1. Do We Agree that Policy 7.4.4.4 is Applicable to Oak Woodlands or to All Woodland Communities?
2. Do We Agree that Oak Woodlands Consist of the Five Oak Woodland Types Included in the General Plan Draft and Final EIR as Represented by the WHR Types BOP, BOW, MHC, MHW, and VOW?
3. Do We Agree that the Important Oak Woodland Habitats Include All Five WHR Oak Woodland Types?
4. Do We Agree with the Criteria and Model for Large Expanses, Habitat Fragmentation, and Potential Corridor Connectivity?
5. Do We Agree with the Designation of Important Oak Woodland Habitat and Blue Oak Woodlands as Priority Conservation Areas as Identified on the Maps?



## **IV. Approach, Components, Variables, and Range of Preliminary Option B Fees**



# Designing the Option B Fee Methodology

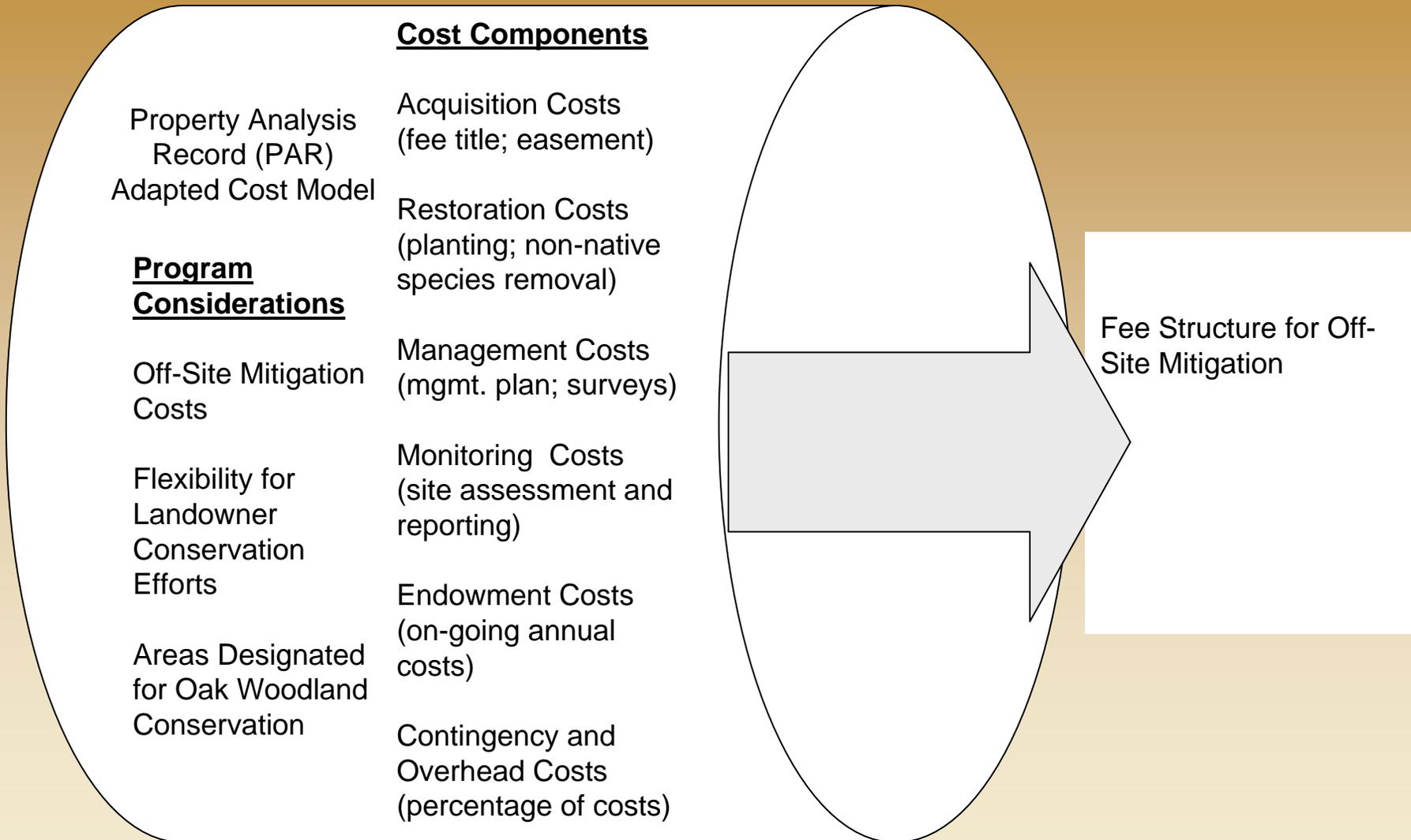
- Ease of Implementation by El Dorado County
- Potential Cost (of Implementing Fee) to the County
- Acceptance by Landowners/Developers
- Resource Protection/Environmental Values
- Compatibility with General Plan Policies



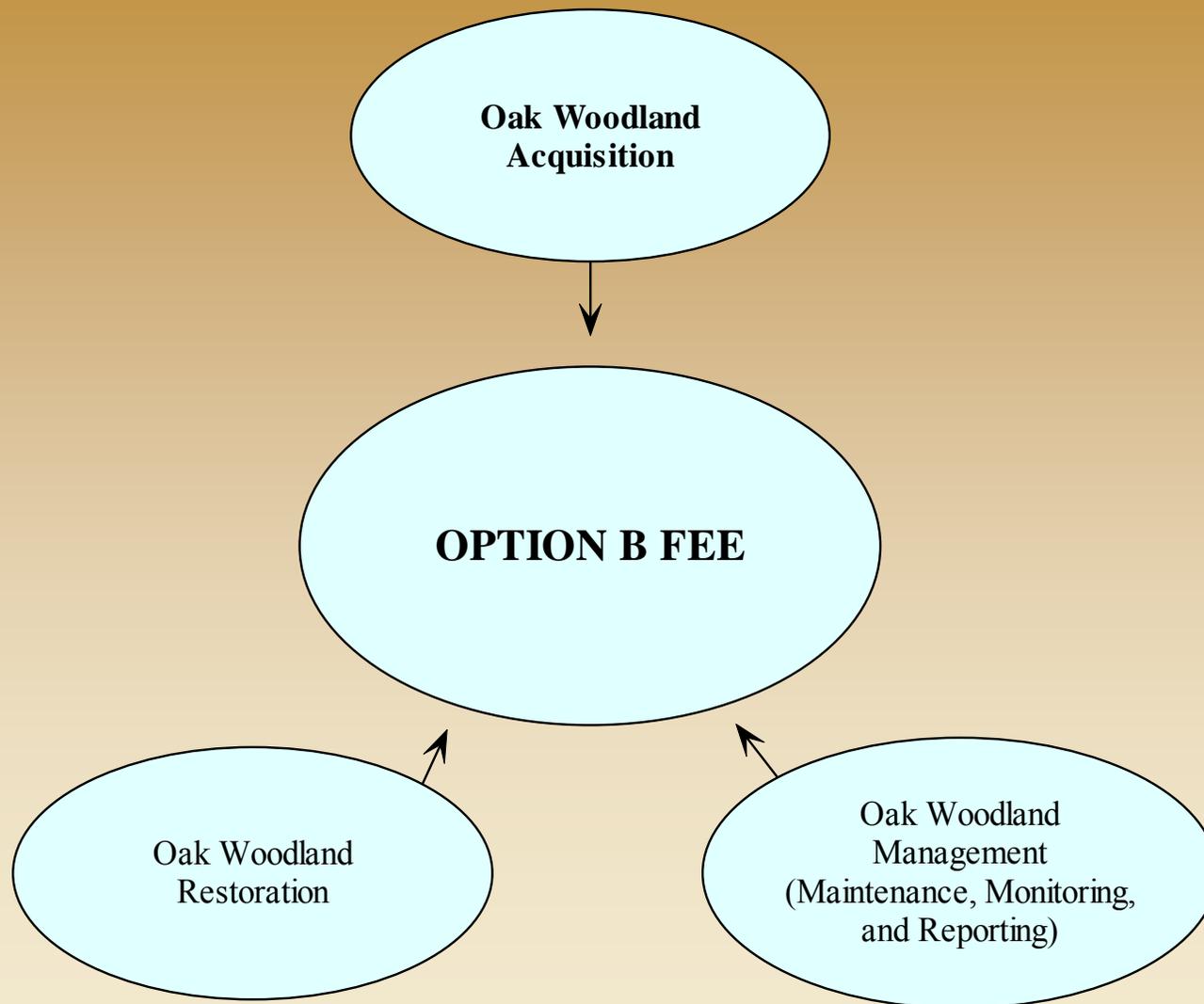
## Adapted Model to Generate Mitigation Cost and Fee

- Adaptation of Property Analysis Record (PAR) Model to Develop Mitigation Costs
- Model Accounts for Acquisition, Restoration, Management, and Monitoring Activities and Associated Costs
- Model Separates Initial, One-Time Costs from Ongoing (Annual) Costs
- Can Be Used to Calculate an Endowment for Ongoing Costs

# Representation of the PAR Adapted Model for the Option B Fee



# Cost Components - Option B Mitigation Fee



# Acquisition Cost Variables

- Fee Title
- Conservation Easement
- Acreage
- Rural vs. Urban

# Examples of Possible Acquisition Costs

<b>Rural (e.g., Agricultural)</b>			
	<b>5 acres and under</b>	<b>5-40 acres</b>	<b>Over 40 acres</b>
<b>100% Fee Title</b>	\$ 82,500	\$ 35,255	\$ 12,030
<b>100% Easement (1)</b>	\$ 74,250	\$ 17,628	\$ 2,406
<b>80% easement/20% fee title</b>	\$ 75,900	\$ 21,153	\$ 4,331
<b>50% easement/50% fee title</b>	\$ 78,375	\$ 26,441	\$ 7,218
<b>20% easement/80% fee title</b>	\$ 80,850	\$ 31,730	\$ 10,106
<b>Urban (e.g., Commercial, Industrial, and Residential)</b>			
	<b>5 acres and under</b>	<b>5-40 acres</b>	<b>Over 40 acres</b>
<b>100% Fee Title</b>	\$ 304,278	\$ 87,297	\$ 44,347
<b>100% Easement (1)</b>	\$ 273,850	\$ 43,649	\$ 8,869
<b>80% easement/20% fee title</b>	\$ 279,935	\$ 52,378	\$ 15,965
<b>50% easement/50% fee title</b>	\$ 289,064	\$ 65,473	\$ 26,608
<b>20% easement/80% fee title</b>	\$ 298,192	\$ 78,568	\$ 37,251

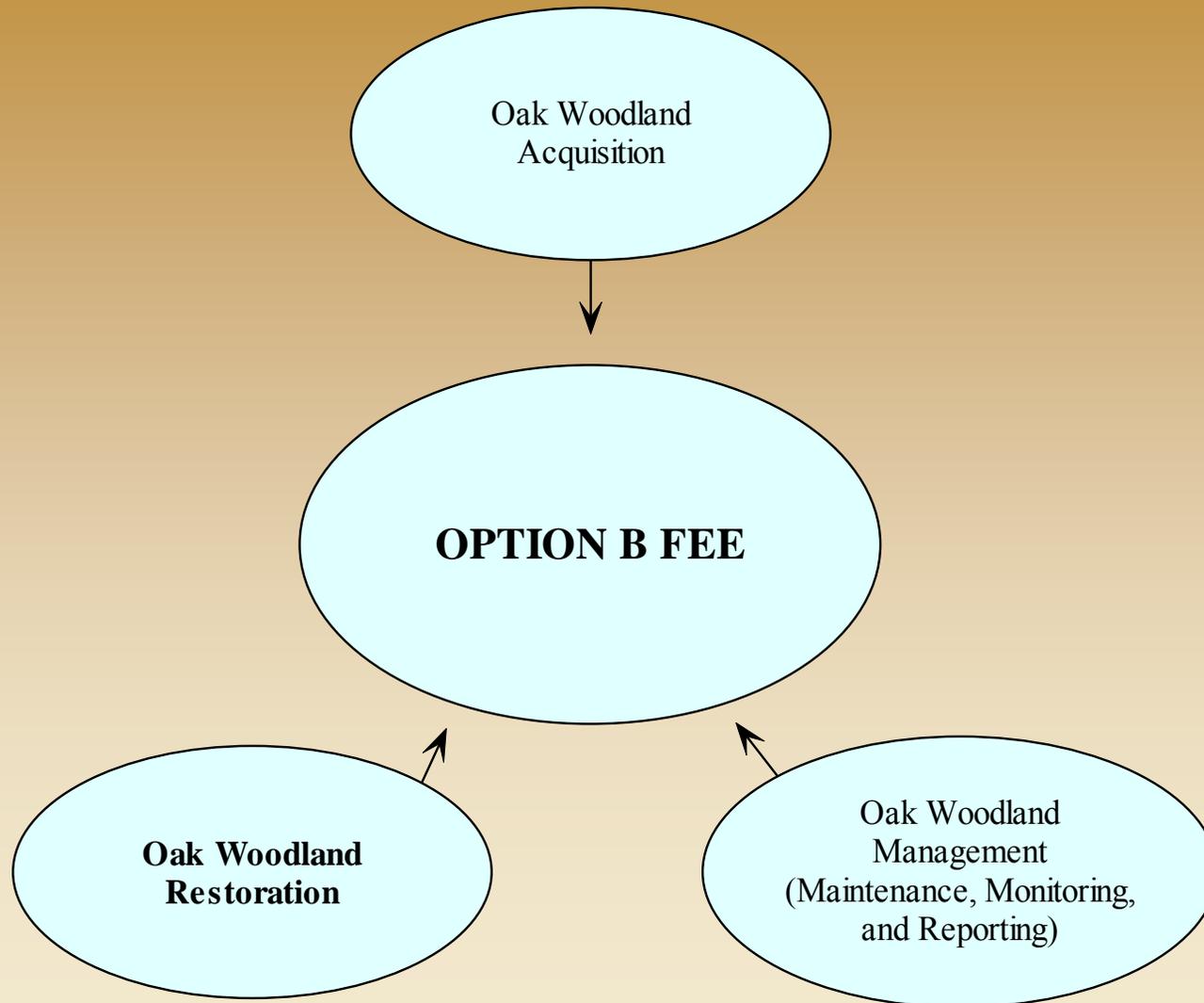
(1) Easement value assumed 90% of fee title for 5 acres and under; 50% for 5-40 acres; and 20% for over 40 acres.

Sample Estimated Land Prices Around El Dorado Hills, Cameron Park/Shingle Springs, Diamond Springs, Placerville, and North County/Cool/Georgetown  
 Source: Metro Listing Service (MLS) of 117 Properties for Sale, November 2006

# Fee Title & Easement Acquisition Cost Range Per Acre

Range of Acquisition Costs		
<b>Rural (e.g., Agricultural)</b>		
\$ 2,406	100% Easement	Over 40 acres
\$ 82,500	100% Fee Title	5 acres and under
<b>Urban (e.g., Commercial, Industrial, and Residential)</b>		
\$ 8,869	100% Easement	Over 40 acres
\$ 304,278	100% Fee Title	5 acres and under

# Cost Components - Option B Mitigation Fee





# Restoration Components

- Tree Planting/Replanting
- Planting of Understory
- Non Native Species Removal
- Irrigation System
- Erosion Control/Grading
- Repair of Severely Degraded Habitat



# Restoration Cost Range

(without Irrigation, Grading, Habitat Repair )

Tree Planting/Replanting
Planting of Understory
Non Native Species Removal
Low: \$2,000 per acre
High: \$4,000 per acre

Assumes planting of between 200-400 oak seedlings per acre.

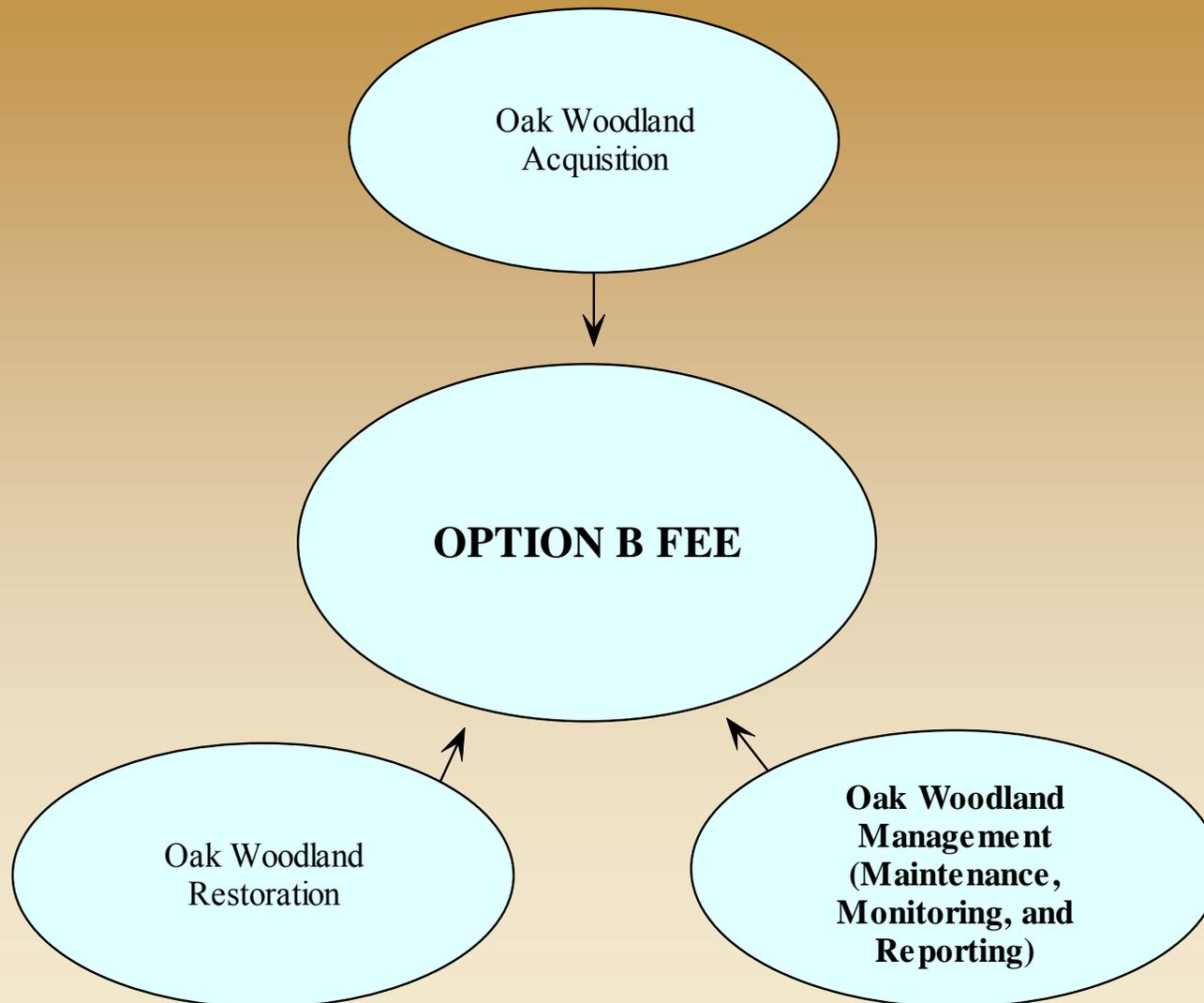
# Restoration Cost Range

(Including all Potential Restoration Activities)

Tree Planting/Replanting
Planting of Understory
Non-Native Species Removal
Irrigation System
Erosion Control/Grading
Repair of Severely Degraded Habitat
Low: \$8,300 per acre
High: \$16,600 per acre

Assumes low degree of site improvements.

# Cost Components - Option B Mitigation Fee





# Management Cost Components

- Biological Surveys
- Weed Control
- Fuels Treatment
- Operations and Management Plan
- Fencing and Gate

# Management Cost Range

Biological Surveys (if needed)
Weed Control
Fuels Treatment
Operations and Management Plan
Fencing and Gate (if needed)
Low: \$1,200 per acre
High: \$2,500 per acre (with fencing)



# Monitoring Cost Components

- Database Management
- Aerial Photos
- Photodocumentation
- Field and Office Equipment
- Annual Operations
- Contingency and Administration
- Endowment

# Monitoring Cost Range

Database Management
Aerial Photos
Photodocumentation
Field and Office Equipment
Annual Operations
Contingency and Administration
Endowment
Low: \$2,100 per acre (incl. endowment for monitoring)
High: \$7,600 per acre (incl. endowment for mgmt & monitoring)

Assumes Endowment Capitalization Rate of 3%



## **V. Preliminary Option B Fee Scenarios**

# Scenario A

## 100% Rural Area Acquired Over 40 Acres

	Low	High
Acquisition <sup>(1)</sup>	\$ 2,400	\$ 12,000
Restoration	\$ 2,000	\$ 16,600
Management	\$ 1,200	\$ 2,500
Monitoring <sup>(2)</sup>	\$ 2,100	\$ 7,600
Total Cost/Fee Per Acre	\$ 7,700	\$ 38,700

- (1) Easement (Low Range), Fee Title (High Range)
- (2) Endowment Includes Annual Monitoring Only (Low Range), and On-Going Management and Annual Monitoring (High Range)

# Scenario B

## 80% Rural / 20% Urban Area Acquisition

	Low	High
Acquisition <sup>(1)</sup>	\$ 10,700	\$ 27,000
Restoration	\$ 2,000	\$ 16,600
Management	\$ 1,200	\$ 2,500
Monitoring <sup>(2)</sup>	\$ 2,100	\$ 7,600
Total Cost/Fee Per Acre	\$ 16,000	\$ 53,700

- (1) Weighted Between 80% Rural Acquisition Over 40 Acres, and 20% Urban Acquisition 5-40 Acres. Low (easement) High (fee title)
- (2) Endowment Includes Annual Monitoring Only (Low Range), and On-Going Management and Annual Monitoring (High Range)

## Scenario C

### 50% Rural / 50% Urban Area Acquisition

	Low	High
Acquisition <sup>(1)</sup>	\$ 23,000	\$ 49,600
Restoration	\$ 2,000	\$ 16,600
Management	\$ 1,200	\$ 2,500
Monitoring <sup>(2)</sup>	\$ 2,100	\$ 7,600
Total Cost/Fee Per Acre	\$ 28,300	\$ 76,300

- (1) Weighted Between 50% Rural Acquisition Over 40 Acres, and 50% Urban Acquisition 5-40 Acres. Low (easement) High (fee title)
- (2) Endowment Includes Annual Monitoring Only (Low Range), and On-Going Management and Annual Monitoring (High Range)

# Summary of Potential Fee Scenarios

Conservation Area	Low <sup>(1)</sup>	High <sup>(2)</sup>
100% Rural	\$ 7,700	\$ 38,700
80% Rural/ 20% Urban	\$ 16,000	\$ 53,700
50% Rural/ 50% Urban	\$ 28,300	\$ 76,300

(1) Easement acquisition, and low ranges of restoration, management and monitoring costs.

(2) Fee title acquisition, and high ranges of restoration, management and monitoring costs.

Includes 10% program administration fee; Excludes 10% contingency.



## Mitigation Fee Example

### Assuming Scenario B (80% Rural / 20% Urban)

#### Assumptions:

- Parcel = 2 acres
- OWMP Maps Indicate Parcel is within Oak Woodland
- Project would impact 0.2 acre of Oak Woodland
- Policy 7.4.4.4 Requires 2:1 Mitigation

Mitigation Fee (Low) =  $0.2 \times 2 \times \$16,000 = \$6,400$

Mitigation Fee (High) =  $0.2 \times 2 \times \$53,700 = \$21,480$

# Alternatives for Application of Fee

- Consider Applying Different Mitigation Ratios Depending on Type of Area Impacted

Possible Mitigation Ratio for IBC or IOWH Lands: 3:1
Possible Mitigation Ratio for Riparian or Critical Corridors: 5:1
Possible Mitigation Ratio for All Other Oak Woodlands: 2:1

# Key Option B Fee Issues for Direction

## For Future Discussion:

- Fee Components/Assumptions
- Relationship of Fee to Type of Woodland Impacted
- Proposed Mitigation Fee Methodology
- Mitigation Ratios (e.g., 1:1, 2:1, 3:1, other?)
- Road and Utility Mitigation Issues



## **VI. Next Steps**

## Next Steps for Completing OWMP

- Policy Direction on Mapping of Priority Conservation Areas
- Policy Direction on Option B Fee Issues
- Draft OWMP, CEQA Documentation, and Ordinance for Public Review
- Final OWMP, CEQA Documentation, and Ordinance Based on Public Input

# Questions/Discussion



*in association with*

