

IX. Monitoring and Reporting

Monitoring and reporting are identified for three elements of this plan: 1) on-site replanting and replacement planting areas that fulfill Policy 7.4.4.4 Option A mitigation requirements, 2) off-site acquisition of conservation and preservation easements by landowners/developers that fulfill Option A or Option B mitigation requirements, and 3) off-site acquisition of oak woodland conservation easements or land management agreements by the County for Option A or Option B purposes with landowners in PCA or OWC areas. The County will be responsible for collecting this information to track and report progress relative to the goals and objectives of this plan.

Reporting will consist of written compliance reviews that will be completed by landowners, land trusts, resource/land management agencies, or County staff. Monitoring by the County will consist of analysis of data from the reports, site visits, and periodic aerial photography interpretation. A monitoring report prepared by the County will be presented to the Board of Supervisors annually. Employing an adaptive management strategy, the County will use this information to revise the OWMP as necessary.

A. Recorded Covenant

Monitoring and reporting will begin with the County-approved mitigation for a project. A covenant (e.g., conservation easement or deed restriction.) will be recorded on each property by the County, project applicant, or landowner. The record will address the following:

- Mitigation measures to be implemented, including, for example:
 - Location and amount of acreage to be conserved and/or replaced
 - Numbers, types, and spacing of saplings, seedlings, and/or acorns to be planted per acre
- Aerial photograph or parcel map with mitigation area delineated. If more than one type of mitigation (e.g., conservation or replacement) will occur, then the area of each type of mitigation will be delineated
- A schedule describing the type and duration of maintenance (e.g., weed control, irrigation)
- Required protection measures (e.g., tree shelters, fencing)
- Best management practices
- Contingency measures such as guidelines for replanting or other activities if criteria are not met (e.g., survivorship of planted trees is less than 90%)
- Contact person(s) responsible for mitigation area monitoring activities
- Schedule for reporting requirements and duration
- Reporting to the County
- Party that is financially responsible for mitigation
- Transfer of responsibilities with property should ownership change
- Mitigation fee with escalation schedule if landowner chooses to discontinue mitigation (e.g., switch from Option A to Option B)
- Compliance/enforcement measures, which may include “stop” work orders, revocation of project approval, and/or performance bonds

B. Reporting

Reporting will consist of written compliance reviews for plantings, other restoration activities, and maintenance at conservation or restoration sites that will be filed with the County for each property. Reporting will be completed by the property owner (e.g., private landowner, land trust, or agency) or the agent of the property owner who has performed the work.

The report for replacement plantings at year 10 will be completed by a certified rangeland manager, certified arborist, qualified biologist, or registered professional forester. If the recorded covenant requires reporting after year 10, the final report in addition to the year 10 report will be completed by a certified rangeland manager, certified arborist, qualified biologist, or registered professional forester. The report(s) will include an estimate of canopy cover and survivorship, if applicable, or other predetermined success criteria.

Reporting will be completed per the following schedule and guidelines:

- Within 60 days of completing replacement plantings or other on-site restoration activities
- Annually as long as maintenance is required per recorded covenant and no fewer than three years following completion of replacement plantings
- At year 10
- Final year if recorded covenant requires reporting beyond year 10

Reports will include the completed maintenance activities and survivorship of plantings. An aerial photograph will be submitted with the year 10 report and with the final report if not year 10. Reporting subsequent to the replanting will conform to the schedule and guidelines in the recorded covenant for the initial planting with the dates tiered to the date of the replanting.

A one-page checklist form will be provided that can be used for reporting all mitigation. One section of the checklist will have space to fill in the acreage being conserved, the acreage being replanted, survivorship, and contingency measures implemented during the year. A second section will have checkboxes to identify each type of maintenance, protection measure, or best management practice accomplished during the year.

If success criteria are not met, additional replacement plantings will be required to compensate for the difference between the goal met and that not met. (Note: Natural regeneration of oaks that occurs within planted sites is included in measures of canopy cover and may be compensated one-per-one for planted oaks that did not survive.) Reporting requirements will restart subsequent to the additional replacement plantings. The applicant will have the option, subject to the County's approval, of contributing to the Option B mitigation fund instead of replanting.

C. Monitoring

Monitoring will be performed by the County for mitigation under both Option A and Option B and for conservation and restoration activities. Monitoring will be conducted by analysis of written compliance reviews, site visits, and/or analysis of aerial photography. By entering into a conservation or other oak woodland management agreement with the County, permission will be

granted for a County representative to enter the property with at least 10 days advance notice to monitor the mitigation.

Oak woodland conservation goals will be assessed by the County on two levels: project-level and countywide. Project-level goals will be assessed by project compliance with mitigation agreements and achievement of performance measures. Countywide goals will be assessed by acreage being conserved through conservation easements, public land designations, or other means and acreage restored to a minimum standard. The County-wide goals and objectives are listed in Section I (Purpose, Goals, and Objectives). Guidelines and performance measures for mitigation are presented in Table IX-1.

Table IX-1: Guidelines and Performance Measures for Mitigation

Assessment Level	Resource Conservation Performance Measures	
	Conservation	Replacement
Project	<ul style="list-style-type: none"> ✓Recorded covenant in place prior to commencement of activities for project requiring mitigation ✓Mitigation fee paid ✓If not mitigating through County or other conservation fund, then conservation site(s) established that meet acreage and conditions of agreement ✓Maintenance, if any, performed on schedule and to specified standards ✓Reporting method identified in recorded covenant 	<ul style="list-style-type: none"> ✓Recorded covenant in place prior to commencement of activities for project requiring mitigation ✓Replacement site planted per agreed acreage, number of trees or acorns per acre, et al. stipulations ✓Maintenance performed on schedule and to specified standards ✓Other restoration activities fulfilled per covenant ✓Minimum 10% oak woodland canopy achieved in 10 years ✓Minimum 90% survivorship after 10 years ✓Replant if survivorship less than 90% and canopy cover less than 10% ✓Reporting method identified in recorded covenant
Countywide	<ul style="list-style-type: none"> ✓Cumulative acreage of oak woodland conserved through conservation easements, acquisition, or other means compared with cumulative acreage removed by projects and cumulative acreage to be mitigated through conservation ✓Acreage within County in each oak woodland category 	<ul style="list-style-type: none"> ✓Cumulative acreage planted by density and maintenance level of planting compared with cumulative acreage removed by projects and cumulative acreage to be mitigated through restoration ✓Acreage meeting minimum goals ✓Acreage requiring replanting ✓Acreage of replanted areas meeting minimum goals

D. Annual Monitoring Reports to Board of Supervisors

Ultimately, the assessment of oak woodland conservation goals will be determined by the acreage and extent of fragmentation of oak woodland habitat remaining in the County upon build-out of the 2004 General Plan. Oak woodland acreage will need to be tracked by total acreage and by oak woodland (CWHR) habitat type. Sensitive oak woodland habitat (i.e., VOW) acreage should not decrease and should be given priority for conservation consistent with OWMP objectives outlined in Section I.

The County oversight committee identified in Sections X of this plan will prepare an annual report to submit to the Board of Supervisors by January 31 of each year. Information for the annual monitoring report will be compiled from reports filed with the County and from monitoring described earlier in this section. The annual monitoring reports also will be submitted to agencies that contribute to conservation and restoration funds and/or efforts (e.g., the California Department of Fish and Game) or that otherwise have a stake in the OWMP (e.g., the County Agriculture Department). The annual monitoring reports will be presented at a regularly scheduled meeting of the Planning Commission by March 1 of each year, and posted on the County website for a minimum period of one month.

The County's annual monitoring report will include:

- Total acreage of oak woodland removed and by habitat type for each year and cumulatively
- Total and incremental acreages of oak woodland conserved in County through November 30 of the reporting period
- Acreage conserved by each method (e.g., conservation easement, acquisition, on-site preservation, or other method)
- Acreage conserved by oak woodland habitat type (e.g., BOW, BOP, MHC, MHW, VOW)
- Acreage of oak woodland habitats under restoration (by restoration activity) in the County
- Acreage of oak woodland habitat under restoration (by restoration activity) that has met the 10-year success criteria
- Map overlay of Figure S-1 showing the locations of the above activities

The annual monitoring report will include the following additional information, which will assist implementing adaptive management strategies as needed:

- Acreage requiring replanting
- Acreage with replacement planting that met 10-year goal following replanting
- Acreage under fully executed conservation easement
- Acreage pending conservation easement or other form of acquisition
- Acreage still requiring mitigation through restoration

Using the database maintained by the County and annual monitoring reports, the County will be able to answer the following questions. The answers will allow the County to implement adaptive management as presented below.

Project-level questions

- Are on-site conservation easements or other agreements being implemented and maintained according to the recorded covenants?
- Do planted sites meet the minimum 90% survivorship objective in 10 years?
- Do planted sites meet the minimum 10% oak canopy cover objective in 10 years?
- For planted sites not meeting the minimum 10-year goals, were planting standards in the recorded covenant implemented (e.g., planting density, best management practices)?
- If planted sites implemented planting standards, but did not meet goals, was maintenance performed per the recorded covenant?
- If planted sites did not meet the 10-year goals, did natural regeneration of oaks occur within those sites and did it compensate for the short-comings of planted oaks?
- If planted sites did not meet the 10-year goals, is there evidence of low site potential (e.g., soil type or natural vegetation in the same general environment)?
- If planted site did not meet goals of 90% survivorship and 10% oak canopy cover, was the same site replanted and did the replanting meet goals?
- If replanted sites implemented planting standards, used an intense level of maintenance, and did not meet both the 90% survival and 10% oak canopy cover goals, what were the characteristics (i.e., soil type, aspect, prior land use) of the planting site that may have prevented replanting success?

Countywide questions

- To what extent have oak woodlands placed under conservation easements or other mitigation methods been maintained to the standard of the agreements?
- Has the overall acreage of oak woodlands increased, decreased, or remained the same? By oak woodland habitat type?
- What percentage of lands with replacement plantings has achieved the minimum 10% oak canopy cover or other restoration goals?
- Have adequate lands (i.e., quantity and quality) been located to meet the off-site mitigation goals for conservation?
- Are the funds available from mitigation fees adequate to achieve the mitigation goals for conservation?

E. Adaptive Management

The success of the OWMP in meeting goals and objectives of the 2004 General Plan will be measured through the Monitoring and Reporting program. The answers to the project and countywide questions presented above will allow the County to implement adaptive management by: 1) revising guidelines for projects as necessary, and 2) revising the OWMP and the mitigation fee. If the Goals and Objectives of Section I of the OWMP are not being met, then the County will review and revise the Plan as necessary.

Several milestones may be timely for assessing the success of the OWMP. Because the OWMP is the first phase of the INRMP, revisions could be incorporated into the INRMP as it is developed. As better vegetation mapping or new change detection updates become available for El Dorado County, countywide assessments of oak woodland habitats could be updated.

This page intentionally left blank.